Milwaukee Water Works Rate Case

3720-WR-108

Transcript of Proceedings

Volume 2

Technical Session

June 25, 2014

ORIGINAL



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1	BEFORE THE	
2	PUBLIC SERVICE COMMISSION OF WISCONSIN	
3	APPLICATION OF MILWAUKEE WATER)	
4	WORKS, MILWAUKEE COUNTY,) Docket No. WISCONSIN, FOR AUTHORITY TO) 3720-WR-108	
5	INCREASE WATER RATES)	
6		
7	EXAMINER MICHAEL E. NEWMARK, PRESIDING	
8	TRANSCRIPT OF PROCEEDINGS	
9	JUNE 25, 2014	
10	VOLUME 2	
11	TECHNICAL SESSION	
12		
13 14	Reported By: JENNIFER M. STEIDTMANN, RPR, CRR LYNN PEPPEY-BAYER, RPR, CM	
15	Gramann Reporting, Ltd. (414) 272-7878	
16		
17	HEARING HELD: TRANSCRIPT PAGES:	
18	June 25, 2014 1 - 197, Incl.	
19	Milwaukee, Wisconsin EXHIBITS: Cramer 18-19,	
20	10:00 a.m. Lewis 24-26, Kaempfer 6,	
21	Behm 6	
22	ORIGINAL	
23		
24		
25		

1	APPEARANCES
2	
3	MILWAUKEE WATER WORKS, by TIM IGNATOWSKI and
4	CARRIE LEWIS, 841 North Broadway, Room 409,
5	Milwaukee, Wisconsin 53202; and
6	City Attorney's Office, by MR. THOMAS MILLER,
7	200 East Wells Street, Room 800, Milwaukee,
8	Wisconsin 53202.
9	
LO	CITY OF WEST ALLIS, VILLAGE OF BROWN DEER,
L1	VILLAGE OF BUTLER, VILLAGE OF GREENDALE, VILLAGE OF
L2	MENOMONEE FALLS, CITY OF MEQUON, CITY OF NEW BERLIN,
L3	VILLAGE OF SHOREWOOD, CITY OF WAUWATOSA, Boardman &
L4	Clark, LLP, by MS. LAWRIE J. KOBZA, One South
L5	Pinckney Street, 4th Floor, Madison, Wisconsin
L6	53701-0927.
L7	
L8	MILLERCOORS LLC, Quarles & Brady LLP, by JOE
L9	WILSON and BRANDON GUTSCHOW, 411 East Wisconsin
0.0	Avenue, Suite 2350, Milwaukee, Wisconsin 53202-4426.
21	
22	
23	OF THE COMMISSION STAFF
24	ARIELLE SILVER KARSH, Office of General Counsel David Prochaska
25	(FOR INDEX SEE BACK OF TRANSCRIPT.)
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1	TRANSCRIPT OF PROCEEDINGS
2	(Discussion held off the record.)
3	EXAMINER NEWMARK: Let's get on the record
4	in the off line we were discussing the prehearing
5	witness and exhibit list and went through some
6	corrections and discussed some other procedures,
7	reviewed some some of the correction process, but
8	now we're ready for our first witness.
9	Let's say that all the documents
10	identified in the witness and exhibit list are in
11	the record. There will be an opportunity to object
12	to the surrebuttal.
13	Let me ask now if there's any objections
14	to the prefiled surrebuttal?
15	MR. MILLER: Actually, yes.
16	EXAMINER NEWMARK: Okay.
17	MR. MILLER: Water Works has one objection
18	in the testimony of Christopher Kaempfer and am I
19	pronouncing that wrong?
20	MS. KOBZA: Kaempfer.
21	MR. MILLER: Kaempfer, right?
22	MR. KAEMPFER: Yes.
23	MR. MILLER: There is on page 10 of
24	Mr. Kaempfer's surrebuttal, there's a reference to
25	an e-mail from Water Works Attorney Thomas Miller,

1	which would be me.
2	EXAMINER NEWMARK: Uh-huh.
3	MR. MILLER: Our objection goes to the
4	fact that this is a citation to a document that's
5	not in the record.
6	EXAMINER NEWMARK: Okay. So let me just
7	get back so it's in testimony. What page did you
8	say?
9	MR. MILLER:
10	Surrebuttal-Wholesale-Customers-Kaempfer-10.
11	MS. KOBZA: You're talking about lines 5
12	through 8?
13	MR. MILLER: Lines 5 through 8, correct.
14	MS. KOBZA: So we could offer that as an
15	exhibit.
16	EXAMINER NEWMARK: Uh-huh.
17	MR. MILLER: My response to that would be
18	that we haven't had I mean, there's no date
19	provided. I think it was on the witness to they
20	made an assertion, asserted to a document not in the
21	record.
22	EXAMINER NEWMARK: Uh-huh. Right.
23	MR. MILLER: I think at this point that
24	should be struck.
25	EXAMINER NEWMARK: Okay. Well, I mean, we

can correct this if we can get document in as a late 1 2 exhibit. However, you know, is this a -- can anyone 3 explain whether that's a -- was it a discovery 4 request? 5 MR. KAEMPFER: Yes. 6 EXAMINER NEWMARK: I'm sorry, let's have 7 your attorney answer. 8 MS. KOBZA: Yes, it was a discovery 9 request. 10 EXAMINER NEWMARK: Yeah. I -- let's get 11 the document in. I think we'll -- I think at this 12 point I'll overrule the objection if we can get the 13 document in within the next three days. If there's 14 any problems with it, we can -- we can revisit the issue, but I don't -- I don't think that will be a 15 16 substantial problem. 17 Do you have copies of it here? 18 MS. KOBZA: No. 19 EXAMINER NEWMARK: No, okay. All right. 20 Well, all right. So let me do this. Let me 21 withhold my ruling but let you file it within three 22 days, and then if I say nothing on the issue, then 23 it will go in. If not, we'll deal with changing the 24 testimony because I don't see that there would be a 25 big problem with an e-mail from you, from

1	Mr. Miller, in response to a party question, you
2	know, unless there's something really objectionable
3	about it.
4	MR. MILLER: Well, it's just that we don't
5	have the benefit of the document in responding to it
6	in our in our testimony today, which is our
7	opportunity to respond to the surrebuttal.
8	EXAMINER NEWMARK: Right. Well, I'll give
9	you an opportunity, if necessary.
10	MR. MILLER: Okay.
11	EXAMINER NEWMARK: You can do that later.
12	Just from the appearance of it, I don't know that it
13	will be that serious of an issue. Hopefully it
14	won't be serious. We'll see how it goes, but I
15	appreciate you pointing that out so we can deal with
16	it.
17	Anything else? (No response.)
18	Okay. Except for that portion of
19	Mr. Kaempfer's surrebuttal, the rest will go in the
20	record along with the exhibits.
21	Anything else before our witnesses start?
22	(No response.)
23	
24	
25	

1		EXAMINER NEWMARK: No. So we'll start
2		with Milwaukee.
3		MR. MILLER: Milwaukee Water Works will
4		call Peiffer Brandt as our first witness.
5	PEIF	FFER BRANDT, MILWAUKEE WATER WORKS WITNESS, DULY SWORN
6		EXAMINER NEWMARK: Go ahead.
7		DIRECT TESTIMONIAL STATEMENT
8	BY M	MR. MILLER:
9	Q	Would you state your name and business address.
10	A	Peiffer Allen Brandt, 1031 South Caldwell Street,
11		Charlotte, North Carolina 28203.
12	Q	And did you cause or cause to be filed direct,
13		rebuttal, and surrebuttal testimony in this rate
14		proceeding?
15	А	I did.
16	Q	And did you file or cause to be filed Exhibits Brandt
17		1 through 10 in this proceeding?
18	А	I did.
19	Q	If you were to be asked the same questions as you
20		were asked in your prefiled testimony today under
21		oath, would your answers be the same?
22	A	They would.
23	Q	And did you review the surrebuttal testimony filed by
24		the intervener witnesses and PSC staff witnesses?
25	А	I did.

1	Q	Would you like to respond to anything in surrebuttal
2		testimony?
3	А	I would. In reviewing the surrebuttal testimony, I
4		don't think I did a particularly good job in
5		responding to Mr. Hanser's response to my rebuttal
6		testimony, and my response was rather clumsy, and I'd
7		like an opportunity to go into a little more detail
8		on that.
9	Q	Okay. And what issue in particular?
10	А	In particular related to the model. In his questions
11		regarding the model, he had raised a question
12		well, first of all, I had responded in such a way
13		that it may have implied that Milwaukee was not being
14		transparent, and certainly didn't mean that at all.
15		Milwaukee has attempted to be as
16		transparent as possible in developing a model. You
17		know, unfortunately, there are limits to the
18		resources available, and to develop a model that is
19		completely user friendly and to walk all customers
20		through that model and make sure everyone has perfect
21		understanding of it is a little unrealistic.
22		But that being said, certainly don't want
23		to think that anyone shouldn't get that
24		understanding, and Milwaukee would certainly like all
25		customers to have a full understanding of the model.

And, you know, Milwaukee would be willing, assuming
the effort is not too great, to spend time with
customers if they have concerns or don't fully
understand the workings of the model.

- Q Do you have any further clarifications or comments on the surrebuttal testimony?
- I think I didn't fully respond to the question regarding the change in revenue requirements. There is a manual step in the model regarding the revenues that when the peaking factors or the customer demand ratios change, that the -- there's a rate -- we have to manually adjust the rate and so the revenues change without -- when you do the model.

I mentioned that, but I think what

Mr. Hanser was referring to was the revenue

requirements, not the revenues, and those also -
there's also a manual step involved in that. When

the peaking factors are changed on the -- for the

customers, because there's a differential rate of

return applied, that -- those different peaking

factors change the asset allocations slightly, which

changes the -- what assets get, you know, a rate of

return of 5.25 versus 6.25 percent is applied. So it

does change the revenue requirements, but the change

is really fairly insignificant.

1		Also I should mention that from Schedule 2
2		of the model, the blended rate of return needs to be
3		copied from that schedule and added to Attachment 14
4		in the revenue requirements model. So that's
5		another manual step within the model, just to point
6		out. And hopefully with that explanation, you know,
7		Mr. Hanser can fully understand the model. But
8		again, you know, if there's further questions, I'm
9		happy to discuss those with him or any of the other
10		parties.
11	Q	And does that conclude your comments on the
12		surrebuttal testimony?
13	А	There's one thing I do want to mention is the model
14		has been reviewed both by me personally and other
15		members of my staff as well as Trilogy, and we are
16		confident that the results that it's providing are
17		correct.
18		MR. MILLER: Thank you.
19		EXAMINER NEWMARK: Cross-examination.
20		CROSS-EXAMINATION
21	BY M	S. KOBZA:
22	Q	Mr. Brandt, roughly how many cost of service studies
23		have you personally done?
24	А	When you say cost of service study, are you talking
25		about the detailed cost of service study with the

1		allocation kind of base max day?
2	Q	Yes.
3	А	Those, probably worked on gosh, I don't know, the
4		detailed kind, maybe 15, 20 in various levels. You
5		know, I don't know exactly, but
6	Q	Roughly how many of those, those 15 or 20 or so,
7		involved wholesale community customers?
8	А	Again, trying to recall. Some certainly did, but not
9		all did. You know, I don't know if half. Without
10		looking at a list, I couldn't tell, but I would say
11		some do but not all.
12	Q	Okay. And how many of those involving wholesale
13		community customers did you allocate fire protection
14		cost to the wholesale customers?
15	A	I don't recall exactly. I would have to go and look
16		at those various ones, so I'm not sure about that.
17	Q	Were there some of the cost of service studies you
18		did that involved wholesale customers wholesale
19		community customers where you did not allocate fire
20		protection cost to the wholesale communities?
21	A	Again, I would have to look back to to see. I
22		don't recall.
23	Q	Would you agree that nationally it's more common not
24		to allocate fire protection costs to wholesale
25		communities?

1	А	I think that probably is the case. You know, I don't
2		know the breadth of all the states, but I think that
3		probably is the case. I think Wisconsin, things are
4		handled a little bit differently than they are
5		handled nationally, and certainly the precedent in
6		Wisconsin, certainly by the previous case, is to
7		handle them this way and left it that way. But I
8		I would say that that's probably an accurate
9		statement that the majority do not allocate that but,
10		you know, somewhat of a guess because I don't deal
11		with all the cost of service studies around the
12		country.
13		MS. KOBZA: All right. Thank you.
14		Nothing further.
15		EXAMINER NEWMARK: Okay. Any other cross?
16		MR. WILSON: Just one.
17		EXAMINER NEWMARK: Okay.
18		CROSS-EXAMINATION
19	BY M	MR. WILSON:
20	Q	I appreciate your clarification on the model. I'm
21		Joe Wilson on behalf of MillerCoors. Would you
22		agree, though, that it is too late in this case for
23		MillerCoors' expert to use the explanations you
24		provided in developing testimony or exhibits?
25	А	I don't believe I would. And as I said, the

1	difference was very minor when I used different
2	peaking factors, so I that's not my judgment of
3	whether it's too late or not. I'm not sure. I
4	mean
5	MR. WILSON: Nothing further.
6	EXAMINER NEWMARK: Staff?
7	MS. SILVER KARSH: No questions. Thank
8	you.
9	EXAMINER NEWMARK: Redirect.
10	REDIRECT EXAMINATION
11	BY MR. MILLER:
12	Q Mr. Brandt, did you personally prepare the cost of
13	service study in this case?
14	A I did not. That was prepared by John Wright, who is
15	with my firm. I prepared the revenue requirements
16	piece and the rate design.
17	MR. MILLER: Thank you.
18	EXAMINER NEWMARK: Thanks. You're
19	excused.
20	(Witness excused.)
21	
22	
23	
24	
25	

1		EXAMINER NEWMARK: Next witness.
2		MR. MILLER: Milwaukee Water Works will
3		call Christine Cramer.
4		CHRISTINE CRAMER, MILWAUKEE WATER WORKS WITNESS,
5		DULY SWORN
6		DIRECT EXAMINATION
7	BY M	IR. MILLER:
8	Q	Would you please state your name and business
9		address.
10	А	Christine Cramer, 231 East Buffalo Street, Suite 306,
11		Milwaukee, Wisconsin 53202.
12	Q	And did you file or cause to be filed direct,
13		rebuttal, and surrebuttal testimony in this
14		proceeding?
15	А	Yes, I did.
16	Q	And did you file or cause to be filed Exhibits Cramer
17		1 through Cramer 17 in this proceeding?
18	А	Yes, I did.
19	Q	If were you to be asked the same questions as asked
20		in your prefiled testimony today under oath, would
21		your answers be the same?
22	А	Yes.
23	Q	Did you review the surrebuttal testimony filed by the
24		intervener witnesses and PSC staff witnesses?
25	А	Yes, I did.

1	Q	And would you like to respond to any surrebuttal
2		testimony?
3	А	Yes. I would like to respond to Mr. Kaempfer's
4		testimony regarding in his surrebuttal regarding
5		the validity of the data in the customer demand
6		study, and also to Mr. Rothstein's testimony
7		regarding my Exhibits 3 through 10 that were filed
8		with my rebuttal testimony.
9	Q	What would you like to say regarding Mr. Kaempfer's
10		testimony on the validity of the data?
11	А	Well, three things. First, on pages 7 and 8 on his
12		surrebuttal testimony, Mr. Kaempfer questions the
13		validity of data I used in the customer demand study
14		for the two meters at the primary connection point
15		for the Greendale system.
16		He filed as his Exhibit 4 charts showing
17		the flow rates for those two meters in July of 2012
18		and July of 2013, and the charts show that the meters
19		were reading at their maximum points about 1,000
20		gallons per minute different from each other in July
21		of 2012 but that they had the identical flow rates
22		for July of 2013.
23		Those the July 2013 graph does not
24		reflect the data that was used in the customer demand
25		study, which I again reviewed. Those two meters were

1		consistently reading maximum flow rates about 1,000
2		gallons per minute different in both July of 2012 and
3		July of 2013.
4	Q	And do you wish to introduce any documents that would
5		support that
6	А	Yes.
7	Q	conclusion?
8	А	Yes. I prepared my Exhibit 18, which shows the data
9		that was actually used in the customer demand study
10		for those two meters in July of 2013.
11		MR. MILLER: Okay. I'm going to show you
12		a document. If you'll please wait until I can
13		provide copies.
14		(Exhibit Cramer 18 marked for identification.)
15	BY M	R. MILLER:
16	Q	Would you please identify this document for the
17		record.
18	А	This is my Exhibit 18, and what it shows is a chart
19		of the data that was used, the maximum flow rates and
20		gallons per minute for the two meters in question,
21		for July of 2012 and July of 2013. And as we'll see
22		in looking at these charts, the meters in question
23		did consistently read maximum flow rates of about
24		1,000 gallons per minute different in both July of
25		2012 and July of 2013.

1		MR. MILLER: We Milwaukee Water Works
2		would ask that this document be entered into the
3		record as Exhibit MWW Cramer MWW-Cramer-18.
4		EXAMINER NEWMARK: Any objections? (No
5		response.)
6		Okay. It's in.
7		(Exhibit Cramer 18 received.)
8	BY M	IR. MILLER:
9	Q	Do you have any response to Mr. Kaempfer's testimony
10		about units for commercial and residential charts?
11	А	Yes, I do. On page 10, Mr. Kaempfer refers to an
12		e-mail from City Attorney Thomas Miller to himself
13		stating that the units on the charts of hourly meter
14		reading data for the retail residential and
15		commercial classes were stated in units of one cubic
16		foot per day.
L7		Regardless of what was stated in the
18		e-mail, I do want to clarify that in the demand
L9		study, the units on all of the hourly and daily
20		charts for residential and commercial classes are in
21		fact in units of .1 cubic feet.
22	Q	And just for the record, were you provided a copy of
23		the e-mail as an exhibit to Mr. Kaempfer's
24		surrebuttal?
25	А	No, I was not.

And also on page 10 of Mr. Kaempfer's testimony, I would like to respond to his concern about the -- that the hourly demand charts for residential and commercial customer classes have no zero readings, and I want to clarify what those charts are in fact showing. They're not showing the average hourly demand of the individual customers in the sample.

What they are showing is the total
hourly -- total hourly demands of the residential
class sample and the commercial class sample with
one curve for each day during the sample period. So
the reason there's no zero reading on those charts
is that each of those curves is showing the sum
total of hourly flow for anywhere from 71 to 185
customers, depending on the sample, and the
sample -- the customer class and the sample period.
So it's not unreasonable to think that those would
not have a zero reading given the number of
customers included in those figures.

- Q Okay. Does that -- do you have any further comments on the surrebuttal of Mr. Kaempfer?
- 23 A No.
 - Q Okay. What would you like to say regarding -- or what response do you have to Mr. Rothstein's

1 surrebuttal testimony?

A In Mr. Rothstein's surrebuttal, he talks about my
Exhibits 3 through 10, and after reviewing his
surrebuttal and reviewing again my rebuttal
testimony, I can understand where Mr. Rothstein may
have been mistaken in interpreting the exhibits that
I submitted as 3 through 10, so I wanted to add to
and clarify my explanation of what is shown in those
exhibits.

In those exhibits, I am not showing the average ratios of individuals in the sample. What I'm showing is the peak ratios of the sample as a whole as more customers are added to each of those samples. And so the point that I was making is that as you add more customers to each sample, the ratios — the peaking ratios of the sample as a whole decrease, and that after a certain point, as you add more customers to the sample, it does not substantially change the peaking ratios of the sample as a whole.

- Q Okay. Do you have any further comments on the surrebuttal testimony?
- 23 A No.

MR. MILLER: Thank you.

25 EXAMINER NEWMARK: All right.

1 Cross-examination? 2 CROSS-EXAMINATION 3 BY MS. KOBZA: When was Trilogy hired to do the demand study? 4 5 A It was in, I believe, February of 2012. 6 And prior to starting the study, did Trilogy meet 7 with PSC staff on how to conduct the demand study? No, it did not. 8 A 9 Prior to starting it, the study, did you meet with 10 wholesale customers to discuss the study? 11 No, I did not. A 12 During 2012 and 2013 while the sampling was ongoing, did you meet with PSC staff to discuss the study? 13 14 A No. 15 During 2012 and 2013 while the sampling was ongoing, 16 did you meet with the wholesale customers to discuss 17 this study? 18 No, we did not. 19 When was the sampling completed? 20 Majority of it was completed in October of 2013. 21 However, we have gathered some additional data since 22 then for Shorewood. 23 Based on an exhibit from Mr. Granum, Exhibit 2, O 24 Trilogy representatives met with the wholesale 25 customers in February of 2014. At that time was the

1 demand study completed? No, it was not finalized. 2 A 3 0 Was there a draft of the study done at that time? 4 A No. 5 0 When was a draft of the study first presented to 6 Milwaukee? 7 I don't recall exactly when it was presented. A 0 Do you know whether it was in 2014 or 2013? 9 It was in 2014. A 10 Do you know whether it was in the winter of 2014 or 11 the spring? 12 A I don't recall when we presented the draft to 13 Milwaukee. 14 Was the draft of the study done when Milwaukee filed its application for a rate case on March 4, 2014? 15 16 A No. 17 Do you have -- do you know when the first draft of 18 the study was completed? 19 I don't know the exact date. A 20 Do you have a copy of the demand study up -- I have 21 some questions. That's your Exhibit 2. Okay. I don't have it in front of me. 22 23 MR. MILLER: Do you have an extra? 24 MS. KOBZA: No, I don't have an extra. 25 BY MS. KOBZA:

1	Q	I have a question about the residential retail
2		sampling.
3	А	Okay.
4	Q	Would you agree that an important part of the demand
5		study was selecting the residential retail customers
6		that would be sampled?
7	А	Yes.
8	Q	And the demand study discusses how you went about
9		selecting those samples?
LO	А	Yes.
1	Q	Would you agree that the map that I provided you,
.2		except for the yellow coloring on it, is the same as
.3		what appears in page 30 of your demand study?
4	А	Yes.
.5	Q	And I would like you to check whether the areas that
.6		are yellowed, and I'll tell you that I yellowed those
.7		areas, are the same as the areas you indicate on the
.8		demand study were sampled.
.9	А	These are the areas that we drew our initial
0.0		residential sample from. When I talk on page 29 of
21		the customer demand study, about the 360 accounts
22		that were initially selected, they were selected in
23		fact from these billing routes.
24		I don't could you repeat your question,
25		though? I don't know if I answered that exactly.

1 I just wanted to confirm that this map was an 2 accurate reflection of what you were saying on 3 page 29. 4 A Okay. 5 0 The answer is, yes, it is? 6 A Yes. 7 On page 28 of the demand study in -- in the middle of 8 the page, the second paragraph, you end that 9 paragraph by saying that there are observable 10 differences in demand patterns in different 11 geographic areas of the retail service area, correct? 12 What's the question? 13 I am going to ask you to use this map to show us 14 the -- what the different geographic areas of the 15 retail service area you're basing this statement on. 16 A Is there a question? 17 0 Yes. 18 Okay. What is the question? 19 The question is, using this map, what are the 20 observable differences in the demand areas in the 21 different geographic areas of the retail service area? Describe the different areas on this map and 22 the different -- differences you're seeing in demand 23 24 patterns. 25 Okay. This will take some time. Okay. On -- on

1		page 9 of the customer demand study, I refer to
2		Billing Group 1, Billing Group 2, and Billing Group 3
3		that corresponds to the different geographic areas.
4		The Billing Group 1 areas are the ones shown on map 2
5		with a 100 number, the Billing Group 2 are the ones
6		shown on map 2 with a 200 number, route number, and
7		the Billing Group 3 areas are shown on map 2 with a
8		300 route number.
9	Q	So looking at page 9 and looking at this map, are you
10		saying that the Billing Group 1 are the properties or
11		the area to the north on this map?
12	A	Yes.
13	Q	Even though on the bottom of page 9 it says Billing
14		Group 1, which had relatively low quarterly peak to
15		average demand ratios are primarily located in the
16		central portion of the City of Milwaukee?
17	А	No, I would like to correct that. Billing Group 1
18		should be the billing routes in the center of the
19		map.
20	Q	The ones that start with a 200 is Billing Group 1?
21	А	It's difficult for me to answer this question because
22		I don't have all the detailed backup data that was
23		analyzed for the customer demand study.
24	Q	I'm not trying to trick you. I'm trying to follow
25		what's here, so

1 A Okav. 2 0 So based on what you say on the bottom of page 9 --3 A Uh-huh. 4 0 -- can you tell me where Billing Group 1, 2, and 3 is 5 on this map 2? Based on what I have in front of me, I cannot tell 6 A 7 you all the individual routes that were in Billing Group 2 and Billing Group 1 and Billing Group 3. 8 9 Q Was Trilogy responsible for selecting the residential 10 retail customers that would be sampled? 11 We selected an initial list of 360. We eliminated A 12 some of those that didn't have readings and gave Milwaukee Water Works that list of customers, and 13 14 they were responsible for putting -- installing the electronic devices into the meters for the -- for the 15 16 study. 17 Was Milwaukee Water Works involved in selecting those original 360 customers? 18 19 A We reviewed our process with them, and we reviewed 20 the list, but we were the ones who selected the list 21 of customers to include on that list of 360. Do you have -- my understanding is that ultimately 22 Q 23 you metered 185 customers in July and August of 2013; is that correct? 24 25 A Yes.

1 Can you tell me where those 185-plus customers are, or from which route numbers those 185 customers came 2 3 from? 4 No, not -- not based on what I have here with me 5 today. 6 0 How did you go down from 360 customers to 185 7 customers? Well, as I testified, generally there were a number 8 A 9 of obstacles in getting those meters installed. 10 began the study in February of 2012. There was some 11 delay in actually getting the units from the manufacturer that manufactured them. There was 12 13 delays and problems with gaining access to the meters 14 to install those devices into the meters, and lack of 15 instructions from the manufacturer as to how to 16 collect the data once the meters were installed. So 17 all those led to us having fewer meters installed 18 than we had originally thought we would need for the 19 study. My understanding from the demand study was that in 20 21 order to be representative, you selected 30 customers 22 from each one of these yellow areas; is that correct? 23 A Yes. And also to make sure that we had a sufficient 24 number of customers in case some of the meters could 25 not be installed.

1 Can you tell me whether you had the same number of 2 customers in each of these routes once you reduced 3 the sample size to 185 customers? A 4 No. 5 0 Is it possible that, for example, 136 -- Route 136 would have zero customers in? 6 7 A It's possible. However, I do not believe that it 8 matters. Based on the data that we actually obtained 9 from the 185 customers, I do believe that the sample size was not only sufficient but representative. 10 11 I understand from your rebuttal testimony why you 12 believe it's sufficient from a size perspective. Why 13 do you believe it is representative of the system as 14 a whole given your other -- given your other 15 statements in the demand study? 16 A Well, as I explain in my testimony and we also 17 discussed in the customer demand study itself, we 18 were not interested in obtaining a sample of 19 individual customers whose individual peaking ratios 20 were representative of the average of all the customers in the class. What we intended to do, what 21 22 we wanted to do, and what I believe we were able to 23 do was obtain a sample of customers whose peaking 24 ratios as a group are reasonably representative of 25 the peaking ratios of the class as a whole. And what

1		I showed in Exhibits 3 through 10 is that as you add
2		customers to the sample, those ratios continue to
3		decline, and after a certain point they do not change
4		substantially by adding more customers or a different
5		mix of customers to the sample. So I believe that
6		the sample that we obtained is in fact
7		representative.
8	Q	You added a different mix of customers? Did you say
9		that in your rebuttal testimony, talk about the mix
10		of customers as opposed to the number of customers?
11	А	Well, what I did in those exhibits is that I pulled
12		first one customer from the list of customers that
13		were sampled, then I added another group of 24, and
14		then another group of 25, and so on and so forth. So
15		by looking at different subsets of the sample, I did
16		have a different mix of customers in each of those
17		subgroups.
18	Q	And is that regardless did you pull those
19		customers regardless of whether they're in Billing
20		Group 1, 2, or 3?
21	A	Yes.
22	Q	Would you look at page 29 of the demand study, and
23		the four bullet points in the middle.
24	А	Yes.
25	0	In there are you discussing how different routes are

1		significantly different than the retail area as a
2		whole?
3	А	Yes. With the routes that we initially randomly
4		selected from the billing routes shown on Map 2.
5	Q	But from what I understand you're saying now is that
6		the routes don't matter at all?
7	А	I don't believe so.
8	Q	You don't believe the routes matter?
9	A	Right.
10	Q	So your current view would be you could take all the
11		samples from Billing Group 1, and you would get a
12		representative demand factor?
13	А	I think if you have enough customers in the group
14		that you select, it will bring that demand factor
15		down to a level that represents the composite
16		patterns of the class as a whole.
17	Q	So if you took the all your samples from the
18		middle of a city, for example, that has small lawns,
19		that would be representative of a sample or would be
20		representative of an area in a suburban area that has
21		large lawns?
22	A	As a whole.
23	Q	Would you be able to provide us addresses for the 185
24		customers that were sampled?
25	А	I would have to look at the original data and confer

1 with the utility on whether we'd provide those addresses or not, yes. 2 3 MS. KOBZA: I would like to ask for that 4 as a delayed exhibit, or at least ask for that as a 5 delayed discovery request and then determine whether to ask it to be introduced as an exhibit. 6 7 EXAMINER NEWMARK: Okav. Well, what would the purpose of that be? 8 9 MS. KOBZA: To -- for us to evaluate whether that sample -- that sample is representative 10 11 of the retail system as a whole. 12 EXAMINER NEWMARK: Well, I think at this 13 point I think it's a little too late to be asking for that kind of information in discovery. I think 14 15 that was a question that could have been asked. A 16 demand study was filed in Ms. Cramer's direct 17 testimony, so I think at this point we'll have to 18 forgo that kind of investigation just based on timing. That could have been done far in advance of 19 20 this hearing. 21 MS. KOBZA: I would then like to have this 22 map be introduced as an exhibit. 23 EXAMINER NEWMARK: Okay. Now does it --24 if -- as far as illustrating the point, I mean, this 25 is just a map from the study, and the information in

1	terms of the billing groups or the routes are in the
2	study, so they're identified in the study. So you
3	think it would be helpful as an exhibit to have the
4	visual visual identification on the map?
5	MS. KOBZA: I do.
6	EXAMINER NEWMARK: Yeah.
7	MS. KOBZA: And also based on the
8	testimony that Billing Group 2 is you know, where
9	the different billing groups are.
10	EXAMINER NEWMARK: Okay. Yeah, that's
11	I have no problem with that. Any objections to
12	that?
13	MR. MILLER: No, we have no objection.
14	EXAMINER NEWMARK: Okay. So that would
15	be that is Cramer 19.
16	(Exhibit Cramer 19 marked and received.)
17	EXAMINER NEWMARK: And I am just
18	wondering, are we clear on where the groups are, or
19	was that not fully answered?
20	THE WITNESS: I would have to I believe
21	that the Billing Group 1 groups would be generally
22	the central portion of this map, and Billing Group 2
23	would be the south portion of the map, and Billing
24	Group 3 would be the north northern roughly third
25	of that.

1		EXAMINER NEWMARK: Okay. But does it
2		necessarily correspond with the numbers? Like 100s,
3		200, 300s, that's where you're not so sure?
4		THE WITNESS: I believe it does. It's
5		based on the timing of when the meters are read, so
6		I believe it does correspond to the numbers. And I
7		thought it was 100 as Billing Group 1, but it's not
8		actually, so
9		EXAMINER NEWMARK: Okay. That's fine.
10		All right. So we have 19 in the record.
11		Any more questions?
12		MS. KOBZA: Yeah.
13		EXAMINER NEWMARK: Okay.
14	BY M	S. KOBZA:
15	Q	For the residential analysis, is it correct that you
16		did not use in your analysis any sample results
17		obtained for 2012 for residential customers?
18	А	I'm not sure what you mean by that question. We did
19		analyze results from 2012.
20	Q	For the calculation of the demand factors
21	А	Okay.
22	Q	is it fair to say you did not use any of the
23		residential results for 2012?
24	А	Are you referring to a specific page that I could
25		reference?

1	Q	Let's see. Page 71 and 72. I believe you you
2		indicate that let's see that you used only the
3		third sample results.
4	А	Where does it say that on page 71?
5	Q	Well, maybe it says that on page 91. Would these
6		questions be better for Mr. Granum?
7	А	No.
8	Q	Okay.
9	А	I'm just not sure what you're referring to exactly,
10		and I would like to refer to the same page.
11		MS. KOBZA: Sure.
12		MR. MILLER: So just so I'm clear, is
13		counsel is counsel looking for the page as the
14		predicate for the question?
15		MS. KOBZA: No. I believe the witness is
16		looking for the page.
17		THE WITNESS: Because I don't know what
18		I would like clarification as to what specifically
19		in the customer demand study.
20		MR. MILLER: There was confusion about
21		whether you were referring to page 71 or page 91.
22		MS. KOBZA: I'm referring to the demand
23		factor for the residential class and what time
24		period it's based upon.
25		THE WITNESS: Okay. So are you referring

to Table 25 on page 94? 1 2 MS. KOBZA: Those are the demands you 3 calculated. 4 THE WITNESS: Okay. 5 MS. KOBZA: The sample period. 6 THE WITNESS: Okay, okay. So for the 7 residential class, we used the July and August of 8 2013 sample period which had the highest ratio of 9 max-day and max-hour average day, and we multiply 10 that by a seasonal peak factor based on 2012 and 11 2013. 12 BY MS. KOBZA: 13 So the dates for the sample period were what that you 14 used? Okay. For the residential class? 15 A 16 For the residential class. 17 That was July 14th through August 8th of 2013. 18 Do you know whether the max day for the residential 19 class occurred during July 14th to August 8th? 20 A I did not measure the -- obviously the maximum day or hour use of the entire residential class during that 21 22 time period. So, no, I do not know that. I do know 23 that the seasonal -- the -- sorry -- the system peak 24 day occurred during that time period. 25 In your opinion, is a sample period of 26 days long

1 enough -- is a long enough sample period for a demand 2 study? Well, I believe we captured or were very -- or had 3 4 high probability of capturing the peak day for the 5 residential class during 2013 even though the system 6 peak occurred during that same time period, and I 7 also will say that this sample period is much more 8 extensive than the one that was used in the study that was done in 1977 to establish ratios that have 9 10 been used for Milwaukee's retail classes since that 11 time. 12 If you look at page 74, Chart 33. 13 A Yes. 14 Does -- does that show us what is the max day you're 15 using for the sample? 16 A Yes, it does. 17 And what is the max day? 18 A In total units or ratio? Or which date is it? What 19 are you asking? 20 The date. Q 21 A Okay. 22 Q The date. Okay. July 15, 2013. 23 A 24 EXAMINER NEWMARK: So you're referring to 25 Chart 33?

1		THE WITNESS: Yes.
2		EXAMINER NEWMARK: At page 74 of the
3		study, right?
4		THE WITNESS: Yes.
5		EXAMINER NEWMARK: Okay.
6	BY M	S. KOBZA:
7	Q	If you go to page 93 of the demand study, and at the
8		top of that page, there's a formula?
9	А	Yes.
10	Q	And is my understanding correct that what we're
11		trying to get is the maximum day for the year over
12		the average day for the year?
13	A	Yes.
14	Q	So for the sample that we took that you took of
15		the 185 customers, assuming that you got the max day,
16		you would have the numerator of that of the
17		maximum day for the year; is that right?
18	А	Yes.
19	Q	For the 185 customers, could we get their annual
20		water usage for the year?
21	А	Yes.
22	Q	And we could determine their average day for the year
23		by dividing that by 365?
24	А	Yes.
25	Q	So looking at the equation on the top of page 93, we

1		could do we could calculate the maximum day over
2		average day for over average day for a year
3		without doing any of the calculations that appear on
4		the right side of the equal sign, would you agree?
5	A	Yes, we could, which would give us the max ratio for
6		2013
7	Q	Right.
8	А	alone. We factored in a seasonal peaking factor
9		that took into account 2012 seasonal peak and 2013
10		seasonal peak.
11	Q	But you used a maximum day for the year. You used
12		the 2013 number; is that correct?
13	А	We used the ratio of the maximum day during our
14		sample period to the average day during our sample
15		period.
16	Q	Going back to page 93, the second assumption or, I
17		mean I'm sorry. The second sentence, an important
18		assumption that the analysis makes is that the peak
19		usage ratio within any given period during the month
20		or during the year, paren, quarter or month are
21		fairly constant compared to peak ratios within any
22		other period.
23		Do you believe that assumption to be true?
24	А	Yes.
25	Q	You believe that the peak usage in the summer months

1 would be the same as the peak usage in a winter 2 period? 3 A No, that's not what that is saying. I'm saying is that the ratio of peak usage during a given month, 4 say July of 2013, to the average day usage during the 5 6 month of July would be similar to that ratio if you 7 calculated it based on another individual month's worth of data. 8 9 So the -- you believe that the peak ratio for July 10 when lawn watering may be going on, this ratio -- I'm 11 sorry. The ratio to the average for July would be 12 the same as what you would see -- that ratio would be 13 the same as what you would see in December when 14 there's no lawn watering going on? 15 A I believe it would be similar because the entire 16 average daily demand during that period would also be 17 higher. 18 Going -- based on its calculation on the top of the 19 page, my understanding is you apply a seasonal 20 peaking factor to the ratio you calculated? 21 A Yes. 22 Is that -- do you have the seasonal peaking factor 23 for the residential class? 24 No, not for the residential class by itself. 25 apply the system peaking factors for 2012 and 2013.

1 0 Wouldn't that dampen the peaking factor for the 2 residential class? 3 A Possibly. You also note in the study that the ratio 4 that we proposed for the residential customer class is rounded up from the ratio that was calculated in 5 6 the study. 7 Q Do you assume in this study that the seasonal peaking factor for the system is the same as the seasonal 9 peaking factor for the residential class? We don't assume that it's exactly identical because 10 A 11 there are other customer classes involved. However, 12 the residential customer class is by far the majority 13 of the customers in the system. And wouldn't the lower peaking ratios that industry 14 0 15 has lower the peaking factor for the system, the 16 seasonal peaking factor for the system? 17 Could potentially slightly lower it. 18 I'd like you to look at the tables on pages 55 to 62. Do you have -- or does Milwaukee have the information 19 20 on -- let's look at page 55, for example -- Brown Deer total for November of 2013 and December 2013? 21 22 I don't have that data. So if I have a question on that, I should ask 23 0 24 Milwaukee? 25 A Yes.

1	Q	Is there a reason you did not include that in this
2		report given that you testified that the report
3		wasn't done at the end of 2013?
4	А	We had completed the bulk of our analysis as of
5		November of 2013. We did not go back and update it
6		further after that point other than from the meetings
7		that we had with the wholesale customers in February
8		of 2014.
9	Q	So the bulk of your analysis was done by November
10		2013?
11	А	On the wholesale customers, yes.
12	Q	But you didn't provide this report or the analysis to
13		the wholesale customers prior to May 4, 2014; is that
14		right?
15	A	We provided the analysis for the wholesale customers
16		themselves to the wholesale customers that we met
17		with in February 2014.
18	Q	How many demand studies has Trilogy done?
19	A	We prepared the one for Milwaukee Water Works.
20	Q	Would you recommend that the methodology you followed
21		in this study be used to develop demand factors for
22		other utilities?
23	А	I believe it's a reasonable methodology, yes.
24		MS. KOBZA: That's all I have.
25		EXAMINER NEWMARK: Let's go off the record

1	for a minute.
2	(Discussion held off the record.)
3	EXAMINER NEWMARK: Okay. Let's get back
4	on. More cross?
5	MR. WILSON: No.
6	EXAMINER NEWMARK: Staff?
7	MS. SILVER KARSH: I just have a couple
8	quick questions for you.
9	CROSS-EXAMINATION
10	BY MS. SILVER KARSH:
11	Q Is there typically a relation between system peak day
12	and residential peak day demand?
13	A There does seem to be, yes, that the peak day for the
14	system typically occurs in the summer months and also
15	seeing that the highest demand for residential
16	customers that we sampled also occurred in the same
17	time period.
18	MS. SILVER KARSH: No further questions.
19	Thank you.
20	EXAMINER NEWMARK: Okay. We have
21	rebuttal? I'm sorry, redirect?
22	REDIRECT EXAMINATION
23	BY MR. MILLER:
24	Q Just to reiterate the question that Judge Newmark
25	asked.

1	A	Uh-huh.
2	Q	You were asked if this was a reasonable methodology
3		or would you recommend this methodology.
4	А	Uh-huh.
5	Q	Is this methodology that Trilogy used an improvement
6		over the data that is currently in place under the
7		2009-11 rate case?
8	А	Yes. Absolutely. I think one of the major flaws
9		with the 1977 study that is was used to establish
10		the current ratios is that it looks at the average of
11		the individual customers within each customer class
12		rather than approximating the demand patterns of the
13		class as a whole, and what we found from monitoring
14		individual customers is that the ratios for
15		individual customers tend to be much higher than the
16		ratio of the class as a whole. When you add a group
17		of customers together that are peaking at different
18		times, that has a very strong muting effect on the
19		demand of the group as a whole, and the 1977 study
20		only looked at averages of individual customers.
21		MR. MILLER: No further questions.
22		EXAMINER NEWMARK: Okay. Thanks. You're
23		excused.
24		(Witness excused.)
25		

1		MR. MILLER: Milwaukee Water Works calls
2		Erik Granum.
3	ERI	K GRANUM, MILWAUKEE WATER WORKS WITNESS, DULY SWORN
4		EXAMINER NEWMARK: Okay.
5		DIRECT EXAMINATION
6	BY M	R. MILLER:
7	Q	Please state your name and business address.
8	А	Erik Granum, 231 East Buffalo Street, Suite 306,
9		Milwaukee, Wisconsin.
10	Q	And did you file or cause to be filed direct
11		direct, rebuttal, and surrebuttal testimony in this
12		rate case proceeding?
13	А	Yes, I did.
14	Q	Did you file or cause to be filed Exhibits Granum 1
15		through 15 in this rate case proceeding?
16	A	Yes, I did.
L7	Q	And if you were asked the same questions as asked in
18		your prefiled testimony today under oath, would your
L9		answers be the same?
20	А	Yes, they would.
21	Q	Did you review the surrebuttal testimony filed by the
22		interveners and PSC staff?
23	А	Yes, I did.
24	Q	Do you have any responses to anything filed in the
25		surrebuttal testimony?

1	А	No, I don't.
2		MR. MILLER: Okay.
3		EXAMINER NEWMARK: Cross-examination? Who
4		has questions?
5		CROSS-EXAMINATION
6	BY M	IS. KOBZA:
7	Q	Mr. Granum, do you know anything more about the 185
8		customers that were sampled than what Ms. Cramer
9		testified about?
10	А	Not without looking at the data in more detail.
11	Q	But you could look at the data in more detail?
12	А	I believe we have the addresses of the sampled
13		customers.
14	Q	And you could determine how many of them came from
15		each one of these routes?
16	А	We could.
17	Q	After you reduced the sample size from 360 sample
18		sites to 185 sample sites, did Trilogy do anything
19		more to determine that the sample was representative
20		of the system as a whole?
21	А	Well, we performed the analysis of the data that we
22		received, and during that analysis, we came to the
23		conclusion that it was representative of the
24		residential class as a whole.
25	Q	And how did you do that if you don't have information

1 on the residential class as a whole? 2 I think Ms. Cramer testified to this in her rebuttal A 3 and in her testimony regarding the sample size, and as more customers are added to the sample, there is 4 5 very little variability once there are a certain 6 number of customers within that sample. So adding 7 more customers would not provide much more information. 8 9 And I'm not asking about customer size. I'm asking about whether the customers are suburban customers 10 11 that have lawn watering versus, perhaps, central city 12 customers that don't have lawn watering. 13 A I see. 14 How do you determine that the sample size is 15 representative of the -- of the retail area as a 16 whole? 17 We did not perform any additional analysis as to 18 whether the sample that we received was either 19 representative of or closely aligned with our 20 original sample of 360 customers or the other 21 characteristics that we measured in determining the 22 residential sample and the methodology of selecting 23 it. Because you did -- you did do that analysis for the 24 25 360 customers to determine that it was

1		representative; is that correct?
2	A	Yes.
3	Q	And you thought it was important to do that?
4	А	Yes, we did.
5	Q	Then you did not do it, though, with the 185 sample
6		sites that were ultimately sampled?
7	А	No, we did not.
8		EXAMINER NEWMARK: Can you explain why?
9		THE WITNESS: Well, there are, I guess,
10		two things. One, that we could not considering
11		the the issues with getting or attempting to get
12		the entire sample, the meters installed with those,
13		we were just using the best available data we could
14		get. In addition, once we actually performed the
15		analysis in reviewing the results, we did not think
16		it necessary to look further into that because of
17		there was not so much variability in the quarterly
18		billing records that we viewed that would make a
19		much big difference with the what we found in our
20		results.
21		EXAMINER NEWMARK: Okay. But in terms of
22		planning the study, there's no threshold number,
23		it's just a raw number of meters you needed in your
24		mind? Was there if we had 50, would we keep
25		going with the study or would we re-evaluate?

1 THE WITNESS: I'm sorry, could you clarify 2 that question? 3 EXAMINER NEWMARK: Well, I mean, when 4 you're planning the study, what if only -- you're 5 only able to get 50 meters installed, would you have 6 gone back to the City and said this just isn't 7 enough, or would you perform the analysis and then determine whether, you know, the study worked or 8 9 not? 10 THE WITNESS: We actually did perform the 11 analysis. You know, as it was over a number of 12 different time frames over two years or a year and a 13 half of sampling and collection, you know, with preliminary results to determine that the number of 14 customers, while not perfect by any means, was 15 sufficient to -- to continue with the analysis. 16 17 EXAMINER NEWMARK: Uh-huh. Okay. More 18 questions? 19 MS. KOBZA: Hang on. 20 BY MS. KOBZA: You mentioned the problems you had getting the 21 22 sample. Can you just go into that a little bit? 23 What -- I mean, you don't have to go into the shipping was difficult, but did you have problems 24 25 installing the meters? Or explain that.

1	А	Well, I did not install the meters myself, it was MWW
2		staff, so I don't know how much detail I can get into
3		with with that process.
4		MS. KOBZA: Nothing more.
5		EXAMINER NEWMARK: Okay. More cross?
6		MR. WILSON: No.
7		EXAMINER NEWMARK: Staff?
8		MS. SILVER KARSH: No questions.
9		REDIRECT EXAMINATION
10	BY M	MR. MILLER:
11	Q	Based on the data that you obtained, does it matter
12		where the residents are from a geographic area?
13	А	I don't believe so.
14	Q	Why not?
15	А	Because as more customers are added to the sample,
16		regardless of where they're from, once we have
17		enough, there is not going to be much variability in
18		the entire sample peak demand ratios as a whole as
L9		more customers are added to that sample. It
20		doesn't regarding water use, it doesn't matter in
21		the geographic area.
22	Q	And that was addressed in Ms. Cramer's rebuttal this
23		morning?
24	А	Regarding sample size, yes.
25		MR. MILLER: No further questions.

1		MR. MILLER: Milwaukee Water Works calls
2		Carrie Lewis.
3	CAR	RIE LEWIS, MILWAUKEE WATER WORKS WITNESS, DULY SWORN
4		DIRECT EXAMINATION
5	BY M	IR. MILLER:
6	Q	Would you please state your name and business
7		address.
8	А	Carrie Lewis, 841 North Broadway, Room 409,
9		Milwaukee, Wisconsin.
10	Q	And did you file or cause to be filed direct,
11		rebuttal, and surrebuttal testimony in this rate case
12		proceeding?
13	А	Yes, I did.
14	Q	And did you file or cause to be filed Lewis 1 through
15		Lewis 23 in this rate case?
16	А	Yes, I did.
17	Q	If you were asked the same questions as posed in your
18		prefiled testimony today under oath, would your
19		answers be the same?
20	A	They would.
21	Q	Did you review the surrebuttal testimony filed by the
22		interveners by the intervener witnesses and PSC
23		staff?
24	А	Yes.
25	Q	And do you wish to respond to anything in that

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- A Yes, I would. I would like to address a couple of Mr. Kaempfer's points on data accuracy, on contractual language, and on fire protection.
 - Q Okay. What, if anything, do you wish to say in response to Mr. Kaempfer's discussion of the accuracy of flow metering results for Greendale?
 - A Mr. Kaempfer's surrebuttal, he discusses what he calls meter inaccuracy on Greendale, and he gives two examples. And Ms. Cramer talked about them a little bit already, and she has provided in her -- I think it was Exhibit 18, a demonstration that the graphs that Mr. Kaempfer provided, one of them was incorrect.

And Mr. Kaempfer's assertion was that the two meters in the Greendale primary station are operating in parallel and, therefore, they should have identical flow rates. And I would like to point out that in fact, although there are two meters, there are different flow paths for the water to get to those meters and, therefore, they are not expected to show identical readings.

- Q Okay. And do you have a document that would help to explain that?
- A Yes. I have a -- we have a drawing of the meter

1		configuration that was provided by the wholesale
2		customers.
3	Q	Okay. And I'm showing you a document. Allow me to
4		distribute it. This is a document that we've labeled
5		Exhibit MWW-Lewis-24. Could you please explain what
6		this document is?
7	А	Again, it's a drawing of the meter configuration in
8		the Greendale station, and if you hold it the long
9		way with the little north arrow pointed to the top of
10		the page, the pipe that sticks out through the
11		through the building there is the inlet of the water
12		flow from Milwaukee's distribution system into the
13		Greendale station. And if you keep going straight,
14		it goes through one meter and into their system, but
15		there's also a sharp right angle and then another
16		right angle and another right angle, and the second
17		meter is in that different flow path. So the point
18		is they have two very different flow paths to the
19		meters, and one would not expect the meters to be
20		giving identical readings.
21	Q	And this was a document provided to you that was
22		the fourth page of the document, but this was a
23		document provided to you in response to Milwaukee
24		Water Works' second discovery request?
25	А	I think it's the third page to the discovery request.

A

- 1 Q Yeah, I'm counting the cover page.
 - A Fourth page to the attachment, yes.
- Q Is there anything else you'd like to say on that topic?
 - A Yes, there is. Thank you. I also have another document that shows that not only these two meters, but every pair of meters that has been in that station in recent times displays the same usage pattern, and I have an exhibit to support that as well. Thank you.
 - Q And this is a document that we've labeled Exhibit MWW-Lewis-25. So you --
 - So the first graph that's in here is the monthly consumption of both meters in 2013, and it shows the same pattern that Mr. Kaempfer showed in one of his graphs where meter number one is the blue one, and it's recording a higher flow than meter number two, which is the bottom one. So that's the current meters in 2013. Page 2 is the current meters in 2012, and you can see that there's also a difference in the water that goes through those meters.

If you go to the third page, it is the pair of meters that were installed previous to the two that are in there. And again, the same patterns persist. And if you go back to 2003 and 2004, the

1	meter that the pair of meters that was in prior to
2	those also have the same pattern. So the meters are
3	not inaccurate. They're reading differently because
4	there's a physical reason for that.
5	MR. MILLER: Okay. And we would ask that
6	both exhibits MWW-Lewis-24 and MWW-Lewis-25 be
7	admitted into the record.
8	EXAMINER NEWMARK: Is there any
9	objections?
10	MS. SILVER KARSH: No.
11	EXAMINER NEWMARK: I just had a comment on
12	24. I'm assuming that that document is in ERF,
13	that's the data request response. So if we could
14	use the
15	MR. MILLER: I think that may have come in
16	later in the day.
17	MS. KOBZA: It was, yeah, yesterday at
18	4:00 or something.
19	MR. MILLER: Yeah.
20	EXAMINER NEWMARK: Well, when it does come
21	up on ERF, can you just use a copy of that document
22	so we'll have the file date on there. Then you can
23	put the cover page on top of that, and you'll get
24	your new number for the actual exhibit.
25	MR. MILLER: In submitting the paper

1	copies or in filing it on ERF?	
2	EXAMINER NEWMARK: Yeah, I think we can go	
3	off the record.	
4	(Discussion held off the record.)	
5	EXAMINER NEWMARK: Okay. So no objection,	
6	so that's in the record.	
7	(Exhibits Lewis 24 - 25 marked and received.)	
8	BY MR. MILLER:	
9	Q What, if anything, do you wish to say in response to	
10	Mr. Kaempfer's reference surrebuttal reference to	
11	the New Berlin and Greendale water service	
12	agreements?	
13	A With respect to the New Berlin contract, Mr. Kaempfer	<u> </u>
14	suggests that the reason that there's an excess	
15	demand charge in that contract is to protect	
16	Milwaukee Water Works' distribution system. In fact,	
17	the reason that there's an excess demand charge in	
18	that contract is to discourage excess development in	
19	New Berlin, and that was the City's way to measure	
20	that.	
21	And I would also like to point out that	
22	there is a clause also in that contract that allows	
23	any water that would be used for fire flow that came	
24	through Milwaukee's meters to be forgiven and not	
25	charged toward that excess demand charge and that is	

1		a clear indication that New Berlin is anticipating
2		the provision of fire flow capacity from Milwaukee
3		Water Works.
4	Q	And any response to the discussion of the Greendale
5		water service agreement in Mr. Kaempfer's
6		surrebuttal?
7	А	In his surrebuttal he talks about the contractual
8		language which says that Milwaukee guarantees
9		instantaneous accurate flow of not less than 525
10		or 5.25 million gallons per day, and he seems to
11		infer that that's a maximum, and it is clearly a
12		minimum amount of capacity that is guaranteed
13		reserved for Greendale.
14	Q	What, if anything, do you wish to say in response to
15		Mr. Kaempfer's surrebuttal reference regarding the
16		lack of a guarantee to provide fire flow rates to
17		Greendale?
18	А	I would say that in as for each of our suburban
19		contracts, not having a guarantee in the contract
20		does not equate to fire flow capacity being
21		unavailable. In fact, Milwaukee Water Works has
22		designed, operated, and maintained our system to
23		enable fire flow capacity to be available at every
24		connection point for every wholesale customer, and
25		that is something that we think is is part of our

1		obligation to serve them. It is it's not
2		something that we have considered optional, and it is
3		something that we believe is essential to those
4		communities being able to fight fire. It's not just
5		about how much water you have in your storage tank
6		when a fire breaks out. If there was a need,
7		Milwaukee Water Works would take whatever measures
8		were necessary to provide as much water as those
9		communities needed for emergency response purposes.
10	Q	And why doesn't Milwaukee Water Works guarantee the
11		flow rate?
12	A	We don't specifically guarantee that in the contracts
13		because we don't have control over how those systems
14		choose to design, to operate, or to maintain their
15		systems. We don't have any control over the land use
16		decisions that they make for construction and
17		development in their communities. So we can't be
18		absolutely sure what's going to happen on their side
19		of their borders, but we clearly maintain the
20		capacity, and we maintain our system to be able to
21		get that water to them on a moment's notice.
22	Q	What benefit do the wholesale customers derive from
23		Milwaukee Water Works investing in that capacity to
24		deliver to deliver fire flow?

The wholesale communities benefit from having that,

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1		if you want to call it, an insurance policy
2		available. We are there when they need us. We will
3		get them that water, and it is at a cost to us that
4		we maintain that capacity. We have things sized and
5		replaced at a capacity to be able to sorry
6		deliver that water.
7		MR. MILLER: No further questions.
8		EXAMINER NEWMARK: All right.
9		Cross-examination.
10		CROSS-EXAMINATION
11	BY M	IS. KOBZA:
12	Q	Prior to hiring Trilogy to do the demand study, did
13		Milwaukee meet with PSC staff to discuss the demand
14		study?
15	А	After the the 2009 to '11 rate case, we had a
16		meeting with PSC staff to review sort of some of the
17		lessons learned, if you would, from that rate case
18		and how things could be improved going forward, and
L9		the lack of a modern customer demand study was
20		identified as a gap. We also yes, so we did.
21	Q	And did you get any input from the PSC staff on what
22		that demand study should look like?
23	А	I don't believe so.
24	Q	Were you involved in the selection of the residential
25		retail customers for sampling?

1 A I was not. Did you direct someone from Milwaukee Water Works' 2 3 staff to be involved in that? 4 A Yes. Our meter services manager provided information 5 to Trilogy that they needed. And what kind of information was that? 6 0 7 Meter sizes, meter locations, what type of meter was A 8 in a particular premise, how the new meters, if 9 needed, would be obtained and installed and 10 programmed to deliver the data that Trilogy needed to 11 do their analyses. Did they provide information on the -- whether the 12 13 property was located in an area that was densely 14 populated or less densely populated? 15 A They provided the meter routes that you saw on the 16 map that you discussed earlier. 17 Could you take a look at that map? Do you have a 0 18 copy of it? 19 I do. Thank you. A 20 Based on your knowledge of the Milwaukee retail 21 system in the area, can you give us any broad description of what these different areas would look 22 23 like, whether they're more suburban, whether they're densely populated? 24 25 Well, you can get a bit of a sense of that by -- I

guess by looking at the size of each area. If you can think back to a dozen years ago when 26 people used to walk around on their feet and read individual meters, each one of these blocks is a meter reading route that was designed to be optimized for feet. So the larger areas would have fewer numbers of dwellings that were also more likely to have people at home when the meter reader would go around, and the smaller ones are more densely populated with more difficult access.

- Q Could you describe some of the challenges that

 Milwaukee Water Works faced in metering the selected
 sample sites?
- A Well, I could. Some of them were related to actually procuring the meters themselves for installation.

 There were various hiccups that the manufacturer had that the supply wasn't coming in in time for us to get them in as quickly as we wanted to. There's always a difficulty in getting access to a premise to go into a basement to do meter work of any kind in today's world. The meters had to be programmed specially so that we could collect the data for Trilogy because the devices would only hold a certain number of days' worth of data. Our quarterly billing cycle was different than what those meters would

1		read, and our billing system was was not very
2		friendly about taking these sort of unusually timed
3		readings, it wanted to bill on that. So we had some
4		workarounds to do to get the data available, and then
5		we had to go to each one of the premises every 40
6		35, plus or minus five days, to actually download the
7		data.
8	Q	Were there special meters used for these properties
9		that were different than what Milwaukee was using for
10		other customers?
11	A	It's they're the meters that we're using in our
12		new automatic meter reading program, so these were
13		just the earlier some of the earlier ones that
14		were installed.
15	Q	So now with Milwaukee's new meter reading program,
16		would you have more opportunities to be able to meter
17		residential customers?
18	А	But not on the hourly basis and daily basis that was
19		required with the demand study, no. Not without
20		additional special programming.
21	Q	So just describe for me the type of programming that
22		would be needed in order to do this collect this
23		data.
24	А	I only have a very high level understanding of that,
25		and the difference is that the normal programming for

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the meters is designed for a drive-by quarterly to pick up a single meter reading from the device, and that is what the devices are programmed for in the normal course of business.

In order to do the Trilogy study, there was some additional, literally, computer programing that had to be done to teach this device to hold hourly, or whatever the frequency was, readings for a certain number of days, and 40 was the max -- is the maximum number of days that it could hold that frequency of data without erasing it or writing over itself, and we could not use the drive-by system because then the billing system wanted to use that data and issue bills. So we also had to program some hand-held devices for people to manually go and do the readings.

- Q And for the people to manually do those readings, were they able to do it from the outside --
- 19 A Yes.
- 20 0 -- of the residence?
- 21 A Yes.
- Q So they didn't need to get access to people's basement?
- A No. Once the meter was installed, it was from outside.

1 0 Given that these new meters are -- have been 2 installed or are being installed, do you think it 3 would be easier to collect that data in the future for residential customers than it was in this last 4 5 demand study? Perhaps. They still would have to be specially 6 A 7 programmed, and it still would have to be a special 8 effort to go out and get the readings and do the data 9 analysis. 10 But getting into the basements to change out those O 11 meters, that wouldn't be a holdup anymore? 12 A That's a holdup every single day of our job, Lawrie. So, no, that's not going to get any easier. In fact, 13 14 that's probably going to be harder because we've 15 already done the easy ones. 16 0 Uh-huh. But to sample the ones where the meters have 17 already been changed out, you would have to do the --18 A Which means we would have to get back into the 19 basements again. 20 0 You have to get into the basement to do the 21 reprogramming? 22 A Yes, on the device itself. 23 Do you know -- or does the Milwaukee Water Works know 0 24 the 185 customers that were sampled for the study? 25 Someone does, yes.

1	Q	Would Milwaukee Water Works have the annual water
2		usage for those 185 customers?
3	А	Yes.
4	Q	So that would be something you could provide if you
5		were requested?
6	А	Yes.
7		MR. MILLER: With the objection, again,
8		the customer demand study was provided in I
9		believe I think the statement in the record was
10		that it was provided with Christine Cramer's direct,
11		but actually it was provided in response to a data
12		request from the PSC staff in advance of the
13		hearing. I mean, in advance of the direct
14		testimony. I think this line of questioning is
15		information that there were a lot of data
16		requests in this case in a very short time frame,
17		but it could have been addressed so that it got a
18		full proper airing. I think that time has now
19		passed.
20		EXAMINER NEWMARK: Okay. I'll note your
21		objection, but she hasn't asked for anything yet so
22		we'll see where we go.
23	BY M	S. KOBZA:
24	Q	If the Commission decided it would be worthwhile for
25		it to look at those 185 annual water usage for the

1		185 water customers, I presume Milwaukee would be
2		more than willing to provide it?
3	А	Yes.
4	Q	Milwaukee charges each wholesale customer for the
5		total volume of water delivered to it; isn't that
6		correct?
7	А	Yes.
8	Q	Milwaukee doesn't provide a credit or reduce its
9		charges to the wholesale customer for water used by
10		the wholesale customers in flushing its main, does
11		it?
12	A	No.
13	Q	And it doesn't provide a credit or reduce its charge
14		to the wholesale customers for water lost by the
15		wholesale customers as a result of main breaks, does
16		it?
17	А	It would to New Berlin if that was reported to us.
18		It would defuse that excess demand charge if it
19		caused them to trip that.
20	Q	But other than defusing the excess demand charge, you
21		charge for every gallon of water that would be lost
22		in a main break in Wauwatosa, for example?
23	А	Correct. I don't believe that the use of the water
24		affects the our cost to treat it or deliver it.
25	Q	Does who pays for the cost of the water that's

1		lost in a main break in Milwaukee?
2	А	Are you asking me if it's billed to anyone
3		specifically?
4	Q	Yes.
5	А	It is not.
6	Q	It's not?
7	A	It is not billed to anyone specifically.
8	Q	But for a wholesale customer, it is billed to
9		someone, the wholesale customer?
10	А	It's billed to the wholesale customer's meter, yes.
11	Q	All water used to fight a fire in a wholesale
12		customer goes through the wholesale meter first,
13		correct?
14	А	Unless they have their own wells that they're able to
15		use, yes.
16	Q	So if Milwaukee's providing water to a wholesale
17		customer to fight a fire, the wholesale customer is
18		paying for all the water used to fight the fire?
19	А	That's a volumetric rate that applies to that water
20		also, yes.
21	Q	In Milwaukee, if water is used to fight a fire, is
22		anyone charged for that water?
23	А	It's not billed to any specific account.
24	Q	In Milwaukee, if water is used to flush a
25		distribution main, how is that billed to any

1		account?
2	А	No.
3	Q	Looking at the demand study and the charts on it's
4		pages 55, 56, which are the wholesale customers'
5		water usage.
6		MR. MILLER: Let's get a copy in front of
7		Ms. Lewis.
8		MS. KOBZA: Yeah.
9		MR. MILLER: Can you repeat the page
10		number you were directing Ms. Lewis?
11		MS. KOBZA: Just page 55, for example.
12		THE WITNESS: I see it.
13	BY M	S. KOBZA:
14	Q	Looking down on the November 2013, December 2013
15		where there's no total volume number; is that right?
16	А	There is, yes, you're right.
17	Q	Okay. Does Milwaukee have those total numbers in
18		this example on page 55 for Brown Deer for November
19		2013 and December 2013?
20	А	I believe we provided them to you in response to a
21		request yesterday.
22		MS. KOBZA: That's exactly where I was
23		going. I don't have a nice cover page yet. I
24		apologize.
25	BY M	S. KOBZA:

1	Q	Does this provide does this response provide
2		information for November 2013 and December 2013 for
3		Milwaukee Water Works' metering data for each of the
4		wholesale customers?
5	A	It does. And I would point out that it is a
6		different source of data than the customer demand
7		study data, I believe.
8	Q	Explain that.
9	A	The customer demand study data I believe comes from
10		SCADA readings from the actual meters, and this is a
11		billing query as opposed to an actual usage query.
12		So they may be not perfectly congruent.
13	Q	Would they be very close?
14	A	I wish I would know that, but I don't.
15	Q	Presumably Milwaukee doesn't bill for the water then?
16	А	Yes. But the 30 day months that may be used in the
17		customer demand study may not be the same 30 day
18		exact periods for billing because we would only do
19		readings for billing on workdays. So if the end of a
20		month happened on a weekend, they might not be
21		perfectly corresponding.
22		MS. KOBZA: Okay. I would ask that this
23		be marked as an exhibit.
24		EXAMINER NEWMARK: Lewis 26.
25		(Exhibit Lewis 26 marked for identification.)

1	MS. KOBZA: That is all I have.
2	EXAMINER NEWMARK: All right. And you
3	would like to move that into the record as well?
4	MS. KOBZA: Oh, yes, I will.
5	EXAMINER NEWMARK: All right. Any
6	objection?
7	MR. MILLER: No objection.
8	EXAMINER NEWMARK: It's in.
9	(Exhibit Lewis 26 received.)
10	EXAMINER NEWMARK: Other questions?
11	MS. SILVER KARSH: I have one quick
12	question for you.
13	CROSS-EXAMINATION
14	BY MS. SILVER KARSH:
15	Q One of the issues in this docket is the whether or
16	not economic development rate or EDR should be
17	developed, and I understand that you received a data
18	request from Commission staff regarding whether or
19	not there had been any inquiries. Could you please
20	elaborate a little bit whether or not Milwaukee Water
21	Works has received any interest from customers about
22	an EDR?
23	A I don't remember the time period that the staff
24	requested, whether or not there had been any
25	inquiries, but during the time period that they

1	requested, or that you requested, and since then,
2	there have been no inquiries whatsoever for an
3	economic development rate.
4	MS. SILVER KARSH: Okay. Thank you very
5	much.
6	EXAMINER NEWMARK: Just as a quick
7	follow-up, could you just state succinctly what
8	Milwaukee Water Works' position is on the EDR.
9	THE WITNESS: Yes, I could. Succinctly is
10	Milwaukee Water Works does not wish to have an
11	economic development rate as part of our tariff.
12	EXAMINER NEWMARK: Okay. Redirect.
13	MR. MILLER: Actually, I have no redirect.
14	EXAMINER NEWMARK: Okay. All right.
15	You're excused. Thanks.
16	(Witness excused.)
17	EXAMINER NEWMARK: Let's go off the
18	record.
19	(Discussion held off the record.)
20	(Break taken from 11:52 p.m. to 12:08 p.m.)
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22	
23	
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1		EXAMINER NEWMARK: Who's next?
2		MR. MILLER: Milwaukee Water Works calls
3		Patrick Pauly.
4		EXAMINER NEWMARK: All right.
5	PATR	ICK PAULY, MILWAUKEE WATER WORKS WITNESS, DULY SWORN
6		DIRECT EXAMINATION
7	BY M	R. MILLER:
8	Q	Would you please state your name and business
9		address.
10	А	Patrick Pauly, 841 North Broadway, Milwaukee,
11		Wisconsin 53202.
12	Q	Did you file or cause to be filed rebuttal testimony
13		in this rate case proceeding?
14	A	Yes.
15	Q	And did you file or cause to be filed Exhibit
16		MWW-Pauly-1?
17	A	Yes.
18	Q	If you were to be asked the same questions as were
19		posed in your prefiled testimony today under oath,
20		would your answers be the same?
21	А	Yes.
22	Q	Did you review the surrebuttal testimony filed by the
23		intervener witnesses and the Public Service staff
24		commission witnesses?
25	А	Yes.

1 0 And do you wish to respond to anything in 2 Mr. Kaempfer's surrebuttal testimony? 3 A Yes. 4 How do you respond to Mr. Kaempfer's criticism of 5 your testimony regarding the presence of flow control devices at the wholesale customer connections other 6 7 than Greendale? 8 Mr. Kaempfer questioned why I only described the flow A 9 controls at the two Greendale secondary supply 10 points, and the reason for that is because those are 11 the only two locations that the Milwaukee Water Works 12 limits the flow rate to the wholesale communities. 13 At all other locations, Milwaukee Water Works does 14 not limit the flow rate to the wholesale communities, 15 and per Mr. Kaempfer's testimony, the flow rate at 16 those locations is limited by the capacity of the flow control devices that the wholesale communities 17 18 chose to install. 19 Okay. What response, if any, do you have to 20 Mr. Kaempfer's testimony regarding the purpose served by the flow limiting devices at those two secondary 21 connections in Greendale? 22 Mr. Kaempfer discusses the reason for the flow 23 A control devices being installed initially. My answer 24 25 pertained to why they are still in service and how

1 the flow limits are used. 2 And how are they used currently? 3 A The flow limits are in place to ensure that the 4 primary connection at 60th and Edgerton remains the 5 primary supply point to Greendale. They're also in 6 place to ensure that pressures are maintained on the 7 Milwaukee Water Works side of the connection points. Do they -- is there --8 0 9 There --Α 10 Is there a purpose there to limit the overall flow 11 provided by Milwaukee Water Works? 12 No, there is not. The -- there are -- there's no A 13 aggregate limit on the flow Milwaukee Water Works 14 provides to Greendale. 15 Mr. Kaempfer in his surrebuttal says he's seen no 16 data from Milwaukee that indicates that Milwaukee 17 Water Works can meet max day demand plus fire flow 18 for each customer. Can Milwaukee Water Works provide max day plus fire flow for each customer? 19 20 A Yes. 21 And what data do you have to support that assertion? I've prepared a document I would like to discuss. 22 A 23 This is a document that we've marked Exhibit Q 24 MWW-Pauly-2 on the cover page. Turning to the second 25 page, could you describe this document?

1	А	This is a list of all wholesale customers, the
2		location of their meters, and then the third column
3		is the pertinent flow test performed by the Milwaukee
4		Water Works' staff on out in the field. The flows
5		in gallons per minute and millions gallons per day
6		are calculated down into a residual pressure of 20
7		pounds per square inch in the Water Works' system,
8		and it shows that Milwaukee Water Works has the
9		hydraulic capacity to provide fire flow plus max day
10		demand to all wholesale customers.
11		In addition, using hydraulic modeling, we
12		were able to confirm that the Water Works has the
13		hydraulic capacity to provide the max day plus fire
14		flow during Milwaukee Water Works' retail max day
15		scenario.
16	Q	Okay. Do you have any further comments you'd like to
17		make in response to surrebuttal?
18	А	No.
19		MR. MILLER: No more questions.
20		EXAMINER NEWMARK: Cross-examination.
21		MS. KOBZA: No questions.
22		MR. WILSON: No.
23		MS. SILVER KARSH: No questions.
24		EXAMINER NEWMARK: Sir, I just wanted to
25		point out something on your exhibit. There 's an

asterisk and it points to Menomonee Falls and Butler. It talks about a pump setting. Can you explain that?

THE WITNESS: Correct. The numbers will show for Menomonee Falls and Butler that when the tests were ran, the available flow did not surpass the max day plus fire flow for those two communities, but the caveat is that we instruct our operations staff not to adjust pump settings during our fire flow testing. So in the instance of a fire flow emergency, our operations staff would adjust the pump settings to compensate for that demand.

EXAMINER NEWMARK: Okay. Great. Thanks.

All right. Well, any objections to

Pauly 2?

MS. KOBZA: Yes.

EXAMINER NEWMARK: Okay.

MS. KOBZA: This was an issue that was addressed in Mr. Pauly's rebuttal testimony. This information could have and should have been provided then as part of the rebuttal testimony, in which case we would have had I guess a week and a half to review this and determine whether -- the accuracy and allow me to cross-examine Mr. Pauly on this. We have no way of knowing whether this is accurate and

haven't had the ability to be able to check that.

It should have come in at rebuttal testimony.

EXAMINER NEWMARK: Okay.

MR. MILLER: The document was presented in direct response to Mr. Kaempfer's assertion in the surrebuttal that he had seen no data. It was -- he had been asked the question about whether Milwaukee Water Works has -- whether he agrees that Milwaukee Water Works has the capacity, so we're providing it to the Commission to assist the Commission in determining that question.

Ultimately this is an issue where the current -- or the previous rate case assigned public fire protection to all customers. The wholesale customers have put forth arguments why they should not pointing -- not be allocated public -- public fire protection, pointing to the Franklin case, and we believe that was an issue for -- for the wholesale customers to prove up, but we have responded in this surrebuttal testimony, particularly given the quick time -- turnaround time for the stages of testimony.

I would also add that Mr. Kaempfer himself added testimony in his rebuttal, the community, I think it was Mequon, that had not been addressed in

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his direct testimony, but in light of the judge's 1 2 discussion at the prehearing conference and in the 3 prehearing conference memo, we understood that the 4 tight time frames could result in parties needing 5 to -- to supplement their responses through the 6 prefiled testimony stages. 7 EXAMINER NEWMARK: Okay. What 8 particular -- where are you responding to? It's 9 Mr. Kaempfer's surrebuttal? What page are you -- or 10 question are you looking at? 11 MR. MILLER: Page 3 of Kaempfer's 12 surrebuttal, lines 1 through 5. Mr. Kaempfer specifically puts this question into play where he 13 14 says, Mr. Pauly was asked if MWW can provide max day 15 plus fire for each wholesale customer. Mr. Pauly 16 answered yes. Do you agree with Mr. Pauly? And 17 then the answer is, I've seen no data from Milwaukee 18 that indicates they can provide maximum day plus 19 fire for each customer. We're responding to that 20 surrebuttal. 21 EXAMINER NEWMARK: Do you have any more 22 comments on this? (No response.) 23 Okay. Well --24 MS. KOBZA: I don't know how we are 25 supposed to be able to respond to this type of data

1 offered at the date of hearing, how I can possibly 2 respond with my witnesses. It seems very 3 prejudicial. 4 EXAMINER NEWMARK: Okay. Go ahead. 5 Anything else? (No response.) 6 Well, the Pauly -- Rebuttal-Pauly-3, the 7 assertion is made that Milwaukee's system has the capacity, but was there a basis for that statement before when it was made in rebuttal? Why is the 9 10 proof coming in on sur-surrebuttal? 11 MR. MILLER: Again, I point back to the 12 short time frames. Mr. Pauly was not a witness for the Milwaukee Water Works in direct testimony, but 13 14 we think that this ultimately assists the Commission 15 with getting to the -- with getting to the question about whether Milwaukee Water Works has the 16 17 capacity. 18 EXAMINER NEWMARK: I guess, you know, it's 19 problematic that the proof comes in at this time 20 because it really should have come in on rebuttal, 21 make an assertion that you have the capacity, here's 22 the numbers, and then the wholesale customers can

look at it. It seems to me that this kind of study

could be done pretty quickly because it was done

quickly after surrebuttal, so there really was no

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reason why it couldn't have been done for the rebuttal -- for preparation of the rebuttal.

The quandary I have is that what exactly can be questioned about this? We're not going to test it. The wholesale customers, would they be able to test this themselves? Is that something that could be a potential response to wholesale --

MS. KOBZA: How can I know? I haven't had a chance to show this to our consultants. I can't even answer that question.

EXAMINER NEWMARK: Uh-huh.

MS. KOBZA: And I guess I would say that the attorney for Milwaukee has said a number of times when I asked about additional information, that should have been done earlier, there was plenty of time earlier. I think there were two items that I asked about where those statements were made, and yet this comes in now and the contention is, well, it was a tight time frame. I agree it was a tight time frame for both of us, so I would just ask that we be consistent.

EXAMINER NEWMARK: Okay. Well, I'm going to sustain the objection for that reason so we'll keep that out.

All right. Anything else for Mr. Pauly?

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1		MR. MILLER: I have no	
2		EXAMINER NEWMARK: Okay. And we have	
3	cross?		
4		MS. KOBZA: No questions.	
5		EXAMINER NEWMARK: No cross, all right.	
6	Okay.	Thanks. You're excused.	
7		(Witness excused.)	
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1		MR. MILLER: Milwaukee Water Works calls
2		John Wright.
3	JOH	IN WRIGHT, MILWAUKEE WATER WORKS WITNESS, DULY SWORN
4		EXAMINER NEWMARK: Okay.
5		DIRECT EXAMINATION
6	BY M	IR. MILLER:
7	Q	Would you please state your name and business
8		address.
9	А	John Wright, 12835 East Arapahoe Road, Tower II,
10		Suite 600, 80112.
11	Q	And did you file or cause to be filed direct,
12		rebuttal, and surrebuttal testimony in this rate
13		case?
14	А	I did.
15	Q	And did you file or cause to be filed exhibits
16		Wright 1 through Wright 12 in this proceeding?
17	А	I did.
18	Q	If you were asked the same questions as were asked in
19		your prefiled testimony today under oath, would your
20		answers be the same?
21	A	They would.
22	Q	Did you review the surrebuttal testimony filed by the
23		interveners and PSC staff?
24	А	Yes, I did.
25	Q	And actually before well, do you have any

1		responses that you plan to give to the surrebuttal
2		testimony?
3	А	I have one clarification and one response that I
4		would like to give.
5	Q	Okay. What I'd like to do is, first, you were here
6		for the for Judge Newmark's request to clarify the
7		statement in Wright rebuttal, page 11, regarding the
8		last rate case transmission and distribution
9		question.
10	А	I was here for that.
11	Q	Okay. And I believe that Judge Newmark was drawing
12		your attention to line 18 there which which says,
13		however, because Milwaukee Water Works did not
14		sponsor a cost of service study, it had no ability to
15		render an objection on the issue.
16		Were you implying that there was a legal
17		impediment to Milwaukee objecting to the change in
18		T&D allocation, or could you please clarify?
19	A	I was after rereading that sentence, I can see how
20		it can be inferred that I was implying that there was
21		some legal prohibition against Milwaukee being able
22		to object. In truth what I was attempting to say was
23		that because Milwaukee Water Works did not sponsor
24		its own cost of service study in the last rate case,
25		and staff prepared that cost of service study as well

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1		as the rate design, that my inference is that
2		Milwaukee Water Works was somewhat limited in its
3		ability to question the wisdom of staff on various
4		issues, in particular the allocation of mains between
5		the transmission and distribution function.
6	Q	Okay. Were you present for the cross-examination of
7		Mr. Brandt this morning?
8	А	I was.
9	Q	Okay. Mr. Brandt was asked about how public fire
10		protection is handled on a national basis. Have you
11		previously provided cost of service studies?
12	А	I've previously
13	Q	Sponsored, sorry.
14	А	I previously performed approximately 10 cost of
15		service studies, and I would like to respond as it
16		relates to the question that was asked of Mr. Brandt,
17		and this also gets to a response I wanted to make to
18		the testimony of Mr. Rothstein in his surrebuttal.
19		And the issue is, is whether or not this commission
20		is applying cost of service methodologies that differ
21		from those that are used on a national basis in
22		general.
23		And I do agree with Mr. Brandt that
24		probably it is less common to allocate public fire
25		protection costs to wholesale customers when looked

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at on a national basis. However, it's important to note, number one, that the fact that the Wisconsin Public Service Commission has traditionally allocated wholesale public -- or public fire protection cost to wholesale customers is not necessarily a defect on the part of the Wisconsin Public Service Commission. Specifically I think it can be argued that the Commission here in Wisconsin takes this responsibility for economic regulation for municipal utilities very seriously and, therefore, has traditionally allocated public fire protection costs to wholesale customers because it wishes to make sure that costs are appropriately allocated to those customers who cause costs. And the fact that this may not be done generally on a national basis only in my opinion states that perhaps Wisconsin is using a more detailed and sophisticated approach to cost of service studies.

Now as it relates to counsel for the wholesale customer group and the questioning of Mr. Brandt, I think what I would note is, is that there are, I believe, approximately six states that regulate municipal water utilities from an economic regulation perspective in terms of setting rates. It is quite possible that each one of those states has a

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unique set of cost of service as well as rate design and revenue requirement procedures that may be slightly different from what is commonly used for nonregulated utilities, and that's because each state may have a unique set of precedence and policies that have evolved over the decades.

And so the fact that I or Mr. Brandt have not done a cost of service study where public fire protection costs were allocated to wholesale customers does not invalidate the point that this as well as a lot of other cost of service study issues may be unique to public service commissions throughout the country.

- Do you have any statements that -- any responses you would like to give in response to surrebuttal testimony of any of the intervener witnesses?
- A I would like to clarify something that came up in Mr. Andrew Behm's surrebuttal testimony on behalf of the wholesale customers group. What I would like to clarify is Milwaukee Water Works' position to the use of the inch feet methodology for the allocation of cost of the transmission and distribution functions.

And I would like to make clear that Milwaukee Water Works is arguing that utility-financed plant as well as a depreciation

associated with that plant should be allocated on an inch feet basis. Milwaukee Water Works is not arguing that O&M costs should be allocated on an inch feet basis. We allocate O&M costs in the cost of study on linear feet, and if there was anything in my testimony that created the impression that we were arguing for the allocation of O&M on inch feet, I want to make clear that that's not the case.

I also want to note that in my rebuttal

I also want to note that in my rebuttal testimony which Mr. Behm responded to, I described the fact that in my opinion newer vintage assets, in this case distribution mains, have lower maintenance and repair costs, whereas older vintage distribution mains would have higher maintenance and repair costs.

Now one way that one can interpret my commentary regarding maintenance and repair costs is that I'm talking about O&M, but it's important to note that there are some costs that can be incurred during the normal maintenance and repair process that do and need to be -- do and need to be capitalized.

So, for example, let's say the Milwaukee Water Works is performing maintenance on the valves associated with a particular run of distribution

1		main. It's quite conceivable that as part of that
2		maintenance process, Milwaukee Water Works discovers
3		a faulty valve, in which case at least the cost of
4		that valve, as I currently understand it, would be
5		capitalized as an asset and would then fall under
6		our proposal for using inch feet as an allocator as
7		capital related costs, and so I just want to make
8		that clarification as well.
9	Q	Do you have any other responses you would like to
10		make to surrebuttal testimony?
11	А	I do not.
12		MR. MILLER: No further questions.
13		EXAMINER NEWMARK: All right.
14		Cross-examination?
15		MS. KOBZA: No questions.
16		EXAMINER NEWMARK: No.
17		MR. WILSON: A few.
18		CROSS-EXAMINATION
19	BY M	R. WILSON:
20	Q	Mr. Wright, I'm Joe Wilson on behalf of MillerCoors.
21		Mr. Wright, you provided surrebuttal testimony about
22		MillerCoors' suggestion that it and other large
23		industrial customers should be relieved of the cost
24		of smaller distribution mains, correct?
25	А	Correct.

1	Q	And you cited to the Commission's decision in the
2		last Milwaukee Water Works rate case where the
3		Commission decided that smaller mains provide system
4		redundancy and backup supply to large industrial
5		customers; is that right?
6	А	I did.
7	Q	And you testified that you agreed with the Commission
8		on that point?
9	А	Yes.
10	Q	You also attached to your testimony as Exhibit 11
11		Mr. Behm's testimony on this issue from that last
12		rate case; is that right?
13	А	I did.
14	Q	And do you agree with Mr. Behm's testimony in that
15		last rate case on this point?
16	А	I did at the time I wrote my testimony.
17	Q	Okay. Would you agree then that customers that are
18		served by large pipes but receive a redundancy or
19		backup benefit from smaller lines should share in the
20		cost of those lines?
21	А	I believe that they should share in the cost of those
22		smaller lines.
23	Q	Do wholesale customers also receive redundancy and
24		backup supply benefits from smaller distribution
25		mains?

1	A	I'm going to preface my response by noting that I'm
2		certainly not an engineer and not someone who really
3		understands the system operations at a detailed
4		level, but presumably wholesale customers do receive
5		some benefit from the Milwaukee Water Works' system
6		as a whole, even including those distribution lines,
7		those smaller distribution lines, but that would be
8		something that I think Milwaukee Water Works'
9		engineering expert would probably better testify
10		upon.
11		MS. KOBZA: I'm going to object to this
12		line of questioning. It was not something that was
13		covered in Mr. Wright's surrebuttal testimony

line of questioning. It was not something that was covered in Mr. Wright's surrebuttal testimony regarding wholesale customers. It certainly wasn't anything offered by Miller Brewing with regard to wholesale customers.

MR. WILSON: It's drawing an analogy to testimony that he had in his surrebuttal testimony.

EXAMINER NEWMARK: Yeah. Overruled.

BY MR. WILSON:

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- Q Wholesale customers don't have to pay for Milwaukee Water Works' distribution system, do they?
- A Wholesale customers are allocated a portion of

 Milwaukee Water Works' system costs, and I believe

 that what wholesale customers are allocated are base

1		system costs as well as system max hour and max day
2		costs. To the extent that there are utility-financed
3		mains, which are we pay a rate of return on as
4		well as depreciation expense recovery, it's possible
5		that some of those costs are allocated in some way to
6		wholesale customers.
7	Q	And as a general policy matter, is it your
8		understanding that wholesale customers are not
9		allocated a portion of mains that are 12 inches or
10		smaller?
11	А	You're right. Mains that are 12 inches or smaller
12		are considered distribution on the Milwaukee Water
13		Works' system from a cost allocation perspective.
14	Q	All right. And those the cost of those mains is
15		not allocated to wholesale customers; is that right?
16	А	I would need to verify that before giving you an
17		answer that I feel comfortable with.
18	Q	But is it your understanding that as a matter of
19		policy, the mains that are or distribution mains
20		are not allocated to wholesale customers?
21	A	That I believe that's definitely the case because
22		they're not taking advantage of Milwaukee Water
23		Works' retail distribution system.
24	Q	How is that statement consistent with your earlier
25		statement that they may receive some redundancy or

1		backup benefit from Milwaukee Water Works'
2		distribution system?
3	А	Well, once again, with the preface that I'm not an
4		engineer who's familiar with the hydraulics of the
5		Milwaukee Water Works' system, it's potentially
6		conceivable that there could be some catastrophe on
7		Milwaukee Water Works' system associated with a 12
8		inch or smaller main size that perhaps limits the
9		ability of Milwaukee Water Works to deliver water to
10		a wholesale customer, but I'm very far out on the
11		ledge with that, and I feel very uncomfortable
12		testifying about it, and I think that would have to
13		be addressed with an actual technical expert.
14	Q	Is it your understanding based on what you read of
15		Mr. Behm's testimony in the last case or the
16		Commission's decision that it would have to be the
17		same sort of emergency situation for MillerCoors or
18		other large industrial customers to take service from
19		smaller distribution mains on the system?
20	А	My reading of Mr. Behm's testimony in the rate case
21		was that he made the argument that industrial
22		customers served by meters 8 inches or greater did
23		receive some benefit from the smaller distribution.
24		I can't I do not know if Mr. Behm's testimony in
25		the last rate case discussed this notion of a

1 catastrophic situation on the Milwaukee Water Works' 2 system and how that would or would not affect water 3 deliveries to industrial customers with meters 8 inches or greater in size. 4 5 MR. WILSON: Nothing further. 6 CROSS-EXAMINATION 7 BY MS. SILVER KARSH: 8 I have one question for you. On page 7, line 3 of your surrebuttal testimony, you note that MWW agrees 9 10 that if a wholesale customer received no public fire 11 protection benefit from MWW's system, it should not 12 pay for any public fire protection. In your opinion, 13 is there a cutoff point for receiving a benefit? Is 14 it a sliding scale, or is it a one or a zero? 15 That's a great question. And what I would say is I'm 16 trying to lay out in my testimony two tests that the 17 Commission has recently presented. Test number one 18 was the test that occurred in the Franklin-Oak Creek 19 rate case that tried to address the question of when 20 is a benefit received or when is a benefit not 21 received from the Milwaukee Water Works' system as it relates to public fire protection services provided 22 23 to wholesale customers. 24 And in the Oak Creek rate case, the 25 Commission laid out what I believe were sort of four

key points in considering whether that benefit is received, and that was can -- in this case, the wholesale customer in question was Franklin. Does Franklin have the capability to meet its maximum day and public fire flow requirements based on its own storage.

Criteria number two was could Oak Creek, which was the retail utility providing the supplies to Franklin, provide maximum day plus public fire flows off the Oak Creek system to Franklin.

The third test, I believe, was whether there were any contractual limitations on Oak Creek's ability to serve Franklin during a fire situation.

And I believe the fourth test related to the fact that there were flow control devices between Franklin and Oak Creek that were set to limit the amount of deliveries that Oak Creek made under virtually any circumstances.

And so those four tests, as I understand the Commission's decision in the Oak Creek rate case, were utilized by the Commission to draw the conclusion that Franklin did indeed not receive any benefit from the Oak Creek system from a wholesale public fire protection perspective and, therefore, should not be allocated any costs.

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The second Commission decision that's

relatively recent, it seems to have relevancy, is

the recent Kenosha decision. And both of these,

Franklin-Oak Creek decision and the Kenosha

decision, is cited in my testimony with the

appropriate docket numbers and PSC reference

numbers. But in the Kenosha case, I believe that

and I believe that customer was Pleasant Prairie.

not be allocated any public fire protection costs,

there was a wholesale customer that argued it should

The Commission disagreed with Pleasant
Prairie's perspective, as I interpreted the
decision, because Pleasant Prairie could not
demonstrate that it had the ability to meet its own
max day and public fire flow demands on its own.
Therefore, Pleasant Prairie's petition to not be
allocated those costs was declined by the
Commission.

And so in asking for a bright line as to when you do or do not receive benefit, I can only cite those two decisions as examples of the criteria that the Commission has recently used.

In looking at the factors that the Commission

discussed in Oak Creek and Franklin, did you look at
those factors and apply those to the wholesale

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1		customers?	
2	A	I only did so from the perspective of a	
3		nonengineering witness who was reading Mr. Kaempfer	c's
4		testimony and the testimony of other witnesses on	
5		behalf of the wholesale customer group and trying t	10
6		understand whether those specific criterias had	
7		been criterion had been addressed by them	
8		criteria, criterion in their testimony, and my	
9		conclusion was, is as a nonengineering witness, that	it
LO		they had not really been addressed adequately. So,	
L1		therefore, the case to disallow the allocation of	
L2		public fire protection costs was not made.	
L3	Q	Is there anybody that you could have worked with wh	10
L4		would have looked at that technical aspect to kind	of
L5		review those same factors and support your opinion	
L6		or	
L7	A	Well, that was the purpose of Mr. Pauly's testimony	7
L8		on behalf of Milwaukee Water Works in this docket.	
L9	Q	And did you work with him on this issue?	
0.0	А	Only in the sense that we all reviewed our testimon	ıy
21		and commented as part of the drafting phase.	
22		MS. SILVER KARSH: Okay. All right.	
23		Thank you. No further questions.	
24		REDIRECT EXAMINATION	

BY MR. MILLER:

1	Q	You talked about the Oak Creek and Kenosha examples.
2		Do you believe the Milwaukee Water Works' situation
3		more closely resembled the Oak Creek-Franklin
4		situation or the Kenosha-Pleasant Prairie?
5	A	I would say the Kenosha-Pleasant Prairie fact
6		pattern.
7	Q	Okay. And is that described in your rebuttal and
8		surrebuttal testimony?
9	А	I believe that it is described in my surrebuttal
10		testimony of Mr. Behm.
11		MR. MILLER: Okay. Thank you.
12		EXAMINER NEWMARK: Okay. Thanks. You're
13		excused.
14		(Witness excused.)
15		EXAMINER NEWMARK: All right. That's all
16		we have for Milwaukee. Let's move on, and I think
17		we can get at least one witness in for wholesale
18		I think we have MillerCoors on the list first.
19		MR. WILSON: You had us on the list I
20		think we were after Wholesale.
21		EXAMINER NEWMARK: Oh, you were?
22		MR. WILSON: Uh-huh.
23		EXAMINER NEWMARK: We'll stick to that.
24		MR. WILSON: It doesn't matter.
25		

1		EXAMINER NEWMARK: So wholesale customers
2		can call their first witness.
3		MS. KOBZA: Our first witness is Andrew
4		Behm.
5	AN	DREW BEHM, WHOLESALE CUSTOMERS WITNESS, DULY SWORN
6		DIRECT EXAMINATION
7	BY M	IS. KOBZA:
8	Q	Could you please state your name for the record?
9	А	Andrew Behm, B-E-H-M.
10	Q	By whom are you employed and what is your position?
11	А	I'm a consultant working with SEH, Short Elliott &
12		Hendrickson on this project.
13	Q	On whose behalf are you testifying?
14	А	The group of wholesale communities.
15	Q	Have you submitted written direct testimony dated
16		June 4, 2014, rebuttal testimony dated June 13, 2014,
17		and surrebuttal testimony dated June 20th?
18	А	I have.
19	Q	Is that testimony true and correct?
20	А	Yes.
21	Q	Have you also submitted Exhibits Behm 1 through 5?
22	А	Yes, I have.
23	Q	And are those true and correct?
24	А	Yes.
25	Q	Have you reviewed the surrebuttal testimony filed in

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1		this proceeding?
2	А	I have.
3	Q	And have you heard the testimony offered earlier
4		today?
5	А	Yes, I have.
6	Q	Do you have any response or comment you would like to
7		make in response to either the surrebuttal testimony
8		or the testimony you heard previously today?
9	А	I do have a couple of comments. Related to
10		Mr. Brandt's recalculation of the so-called dividend
11		rate, I disagree with his choice of a baseline for
12		comparison. I would note that in the 2010 order, the
13		PSC said that the purpose of the differential was to
14		mitigate rates for retail customers by setting the
15		rate of return 100 100 basis points lower than
16		wholesale. I think that is a more appropriate basis
17		for comparison to compare between the wholesale rate
18		and the retail rate rather than what Mr. Brandt does,
19		which is to use a hypothetical counterfactual of I
20		think 13 basis point difference.
21		I'd also note that there was some
22		surrebuttal testimony from Ms. Lewis and Mr. Wright
23		about the risk of wholesale customers leaving the
24		system compared to the risk of retail customers
25		leaving the system. Ms. Lewis suggested that

1 Milwaukee Water Works could replace retail customers 2 with new retail customers, which it couldn't do for wholesale. I'm not aware that the population of 3 4 Milwaukee has always been less than or equal to what 5 it is now, and I believe that that argument applies 6 equally to both the retail and the wholesale 7 customers. 8 Related to Mr. Wright's comments about 9 the -- the transmission and distribution mains, I 10 appreciate the clarification. I would like to point 11 out that in 2000 -- in the 2009 to '11 rate case, 12 the PSC did specifically decide that actual costs 13 should be used to allocate contributions for water 14 mains, and I think while that's not exactly the same 15 issue, it is helpful for us to see an appropriate 16 allocation of utility-financed mains for transmission distribution. 17 18 That's all I've got. 19 MS. KOBZA: That's all. 20 EXAMINER NEWMARK: Okay. Cross-examination? 21 22 MR. WILSON: No. 23 MS. SILVER KARSH: No. 24 CROSS-EXAMINATION 25 BY MR. MILLER:

1 Mr. Behm, you said that you're employed by -- did you 2 say SEH? 3 A (Witness nods head.) 4 0 You're -- how long have you been employed there? 5 So I'm just working as a consultant on this case for A 6 them. 7 0 On this rate case. Do you have any other current 8 employer? 9 I -- I am planning to start on Monday an internship 10 at the Food Safety Inspection Service of the USDA, 11 and that will just be for the summer. My main 12 occupation is as a student. 13 Q Thank you. You previously worked, however, at the 14 Public Service Commission? 15 A Right. 16 And you were at the Public Service Commission during 0 17 Milwaukee Water Works' last rate case? 18 A That's correct. You provided, prepared, and sponsored the cost of 19 20 service study in that rate case, correct? 21 That's correct. A 22 Q And that was the only cost of service study presented 23 to the Commission in that case? 24 A Right. I believe that Milwaukee Water Works didn't 25 present one, and the wholesale interveners in that

1		case did not present one.
2	Q	Your opinion in this rate case is that the Commission
3		should deny Milwaukee Water Works' request for a
4		differential rate of return, correct?
5	А	That's correct.
6	Q	And specifically you've opined that the differential
7		rate of return is a, quote/unquote, subsidy?
8	А	Yes, I said that.
9	Q	And specifically that it's a subsidy because the
10		costs shifted to wholesale customers are not
11		reasonably justified by the cost to serve the
12		wholesale communities?
13	А	That's correct.
14	Q	The cost of service study that you sponsored in
15		Milwaukee Water Works' last rate case contained a
16		differential rate of return, correct?
17	А	Yes.
18	Q	Were you aware that at the time that you were giving
19		your testimony in that case that that the
20		differential was in place?
21	А	I was aware that that study contained a differential.
22	Q	And that it was a contested issue?
23	A	I believe it was a contested issue.
24	Q	That the cost of service study that you prepared
25		contained actually a larger differential, 150

1		differential 150 basis point differential,
2		correct?
3	А	I can't recollect the amount of the differential.
4	Q	Okay. Did you think that did you think that the
5		differential in that case was a subsidy when you
6		sponsored the cost of service study?
7	А	It wasn't my job at the Public Service Commission to
8		set the revenue requirement, including the rate of
9		return.
10	Q	But using your definition of subsidy, was it your
11		responsibility to opine as to the reasonableness
12		if there was an unreasonable shift of cost to
13		wholesale customers?
14	А	I I would say that it was in the context of the
15		cost of service study. I didn't look at, for
16		example, what costs were at were classified in
17		which accounts, and depending on what costs were
18		classified in which accounts, that's another instance
19		where misclassified costs could be allocated in a way
20		that was correct in the cost of service but resulted
21		in an unfair allocation of those costs.
22	Q	But does a subsidy imply would you agree that a
23		subsidy implies an allocation of costs, not a revenue
24		requirement issue?
25	А	I I would agree that if the revenue requirement is

1		set incorrectly, that that does not constitute a
2		disparity between customer classes the way it would
3		as if it was a cost allocation issue.
4	Q	Are you familiar with Wisconsin Statute 62.69(2)(h)
5		governing first class city utilities?
6	А	I don't believe I am.
7	Q	Okay. Just going to just so you have it in front
8		of you.
9	А	Sure.
10	Q	This statute applies to first class city utilities.
11		You understand that Milwaukee Water Works is the only
12		first class city utility?
13	А	Yes.
14	Q	And I just want to direct your attention to the
15		portion that I highlighted.
16		MR. MILLER: Do you want a copy? I'm not
17		making it an exhibit.
18		MR. WILSON: What's the statutory
19		reference?
20		MR. MILLER: 62.69(2)(h). I got it.
21		Sorry.
22		MS. KOBZA: Oh, got them? That's good.
23		MR. WILSON: Thanks.
24	BY M	R. MILLER:
25	Q	I just want to direct you to the portion where it's

1 talking about the sale of water to Milwaukee Water 2 Works' suburban retail -- or first class city utility 3 suburban retail customers, and here's the quote, may not be less than one-quarter more than those charged 4 5 to the inhabitants to the city for like use of water. 6 Is the statute requiring a subsidy in your 7 opinion? A Yes. 9 MS. KOBZA: Are you --10 BY MR. MILLER: 11 But you understand that that's the basis for the 125 12 basis point differential between Milwaukee urban 13 customers and suburban retail customers, correct? 14 Not 150 basis points. A 15 I'm sorry. 16 A 125. 17 0 125, yes. 18 A 25 percent difference in the final rates but not in 19 the rate of return. But, yes, I understand that. 20 Okay. Thank you. In your surrebuttal testimony, you 21 disagreed with how Mr. Brandt characterized the 22 Kenosha PSC decision where the Commission denied the 23 differential rate of return. Mr. Brandt had, in 24 drawing the distinction, had used the phrase that 25 Pleasant Prairie was a captive customer due to its

1		contractual arrangements with with Kenosha, with
2		the wholesale supplier, and you had responded that in
3		my view it is not the legal language of the contract
4		that was important, but rather the lack of difference
5		between the risks presented by Pleasant Prairie and
6		those presented by retail customers.
7		Mr. Brandt didn't he took the term
8		captive customer right from the Kenosha decision,
9		correct?
10	А	I'm not I can't speak to that.
L1	Q	Okay.
12	А	Whether it was directly from the Kenosha decision.
L3	Q	Would it help if I just provided you with the
L4		decision?
L5	A	Sure.
L 6	Q	So on page 6 of that final decision, it says, the
L7		Commission finds that Pleasant Prairie is essentially
L8		a captive customer and that Kenosha does not bear
L9		significant risk in serving it as a wholesale
20		customer.
21		You did testify in the Kenosha case, right?
22	А	That's correct.
23	Q	Do you know where the Commission got the term captive
24		customer in that case?
25	А	I don't know with certainty. I speculate it might be

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from my own testimony.

- Q You argued that the differential was not reasonable, right?
- A Uh-huh.
 - 0 Now this document I do want to make an exhibit because it is your prior testimony in the Kenosha case. I'm just going to read from page 12. I'm just asking you to look at line 20. "Is the differential rate of return justified by additional risk Kenosha incurs to serve Pleasant Prairie?" And you answered, "No. Kenosha incurs no greater risk in serving Pleasant Prairie than it does in serving its retail customers. Pleasant Prairie is by contract a captive customer. The 2000 amended water issues agreement provides in Section 1.1 that the village parties shall purchase water exclusively from the KWU and shall not operate or use an alternative water supply source or alternative water treatment plant and shall not contract or arrange with any other person or entity for the operation or use of an alternative water supply source or alternative water treatment plant. Section 4 of the agreement provides that in the absence of a party's breach, the terms of this agreement is permanent. Under these circumstances, Pleasant Prairie is contractually obligated to

1		purchase and use Kenosha water for the foreseeable
2		future."
3		You agree that that was your testimony in
4		that case?
5	А	Yes.
6	Q	In your discussion of Mr. Brandt's testimony this
7		morning, does your example provide a different
8		revenue requirement than Milwaukee Water Works is
9		requesting?
10	А	Could you repeat the question?
11	Q	When you were discussing your response to
12		Mr. Brandt's testimony on cross not on
13		cross-examination but his clarification, does the
14		example that you provide you provided provide a
15		different revenue requirement than Milwaukee Water
16		Works is requesting?
17	A	So you are asking if if I were to calculate a
18		revenue requirement for every customer class having a
19		return of 6.25 percent, would that be different than
20		the revenue requirement you would calculate using the
21		differential?
22	Q	Yes. Because you assure that the 6.25 was the
23		baseline?
24	А	That would be a different total revenue requirement.
25	Q	Okay. Would it be higher or lower?

1	А	It would be higher.
2	Q	And do you know do you know how much higher?
	660	
3	A	I expect it would be higher by the amount of what I
4		called the dividend in my testimony. I can't recall
5		exactly what the number was.
6	Q	Does Mr. Brandt's example that he provided today
7		provide for the same level of revenue requirements?
8	А	I haven't checked it, but I believe that it would.
9	Q	Is it appropriate to do the analysis around some
10		revenue requirements, not a theoretical around the
11		same revenue requirements, not a theoretical higher
12		revenue requirement?
13	А	I don't believe that it makes a difference for the
14		purpose of calculating the savings to retail
15		customers from 100 from 100 basis point
16		differential. I would note that using a different
17		amount of a differential for the baseline would make
18		a difference in the comparison.
19		MR. MILLER: I don't have any further
20		cross.
21		EXAMINER NEWMARK: All right. Any cross?
22		MS. SILVER KARSH: Un-huh.
23		EXAMINER NEWMARK: Redirect?
24		MS. KOBZA: No.
25		EXAMINER NEWMARK: No, all right. Thank

1	you, sir. You're excused.
2	(Witness excused.)
3	EXAMINER NEWMARK: Let's go off the
4	record.
5	(Discussion held off the record.)
6	EXAMINER NEWMARK: Let's get on the record
7	for a second.
8	MR. MILLER: Six.
9	EXAMINER NEWMARK: Behm 6.
10	MR. MILLER: Then Milwaukee Water Works
11	would move Behm 6 into the record.
12	EXAMINER NEWMARK: Then no objections?
13	(No response.)
14	(Exhibit Behm 6 marked and received.)
15	EXAMINER NEWMARK: Off the record.
16	(Discussion held off the record.)
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1		EXAMINER NEWMARK: All right. Let's get
2		on the record.
3	C	CHRISTOPHER KAEMPFER, WHOLESALE CUSTOMERS WITNESS,
4		DULY SWORN
5		EXAMINER NEWMARK: All right.
6		DIRECT EXAMINATION
7	BY M	IS. KOBZA:
8	Q	Okay. Could you please state your name for the
9		record.
10	А	Christopher Kaempfer.
11	Q	And by whom are you employed?
12	A	Kaempfer & Associates Consulting Engineers.
13	Q	Whose behalf are you testifying?
14	А	Milwaukee wholesale customers.
15	Q	Have you submitted written direct testimony dated
16		June 4, 2014, rebuttal testimony dated June 13, 2014,
17		and surrebuttal testimony dated June 20, 2014?
18	А	Yes, I have.
19	Q	Do you have any corrections you would like to make to
20		any of those testimonies?
21	А	Yes, I do.
22	Q	Could you please describe that?
23	А	Yes. Surrebuttal testimony, page 8. Should I read
24		what's there and what I would correct?
25	Q	What lines do you

1 A Lines 1, 2, and 3. I'm sorry, what page did you say? 2 0 3 A Page 8. 4 8, okay. 0 Lines 1, 2, and 3. 5 A 6 All right. Why don't you read what's there and then 7 how you would correct it. 8 Okay. Starting on line 1, "In 2003 the meters had A 9 identical readings of about 2,500 gallons per minute. We still don't know if the meters are reading correct 10 or incorrect. It appears that the Milwaukee Meter 2 11 12 is reading about 1,000 gallons per minute low." 13 What I would change to would be in 2013, 14 the meters still had different readings and we still don't know if the meters are reading correct or 15 16 incorrect. 17 The next sentence would be eliminated. 18 I would also like to correct the exhibits. 19 Let's wait on that for a minute. 0 20 Okay. A 21 So with that correction to your surrebuttal 22 testimony, would the testimony you submitted be true 23 and correct? 24 A Yes. 25 Have you also offered Exhibits Kaempfer 1 through 5?

1 Α Yes. And do you have any changes or corrections you'd like 2 0 3 to make to those exhibits? 4 A I would like to replace Exhibit 4 with Exhibit 4r. 5 0 Okay. And I do have a copy of that. Can you explain the correction on Exhibit 4r? 6 7 A The first page is Village of Greendale meter station readings for July 2012, and it shows the two meters 9 1,000 gallons apart. 10 I just mean what is the change between what you --0 11 On the second page, it shows the meters in July of 12 2013 for the same period, and instead of the two 13 meters being shown to be identical, Meter 2 is now 14 shown to be at 1,500 gallons a minute instead of 2,500 gallons a minute. 15 16 Does this correct what Christine Cramer testified Q 17 earlier to as the problem with your Exhibit 4? 18 A Yes. 19 So with that correction, are your Exhibits 1 through 5 true and correct? 20 Yes, they are. 21 A 22 MS. KOBZA: So I'd like to move then -- do 23 I have to do that, the correction 4r into the 24 record? 25 EXAMINER NEWMARK: Yes. Let's move it in.

1	Any objections?
2	MS. SILVER KARSH: No.
3	MR. MILLER: Are we objecting I mean,
4	is he also correcting the testimony as a formal
5	correction, in other words submitting 8r?
6	MS. KOBZA: We would submit a page 8r.
7	MR. MILLER: I would like to I mean, I
8	was listening to it, but I would actually like to
9	see what that looks like because I'm not I think
10	I would have to I mean, essentially the witness
11	is accepting the correction from Ms. Cramer, but the
12	line would still read, this alone should be
13	justification for not using the results of the
14	customer demand study, and I would object to any
15	correction that would not also include striking that
16	statement. The basis for the statement has been
17	retracted.
18	EXAMINER NEWMARK: Okay. Response?
19	MS. KOBZA: I guess I would ask the
20	let's go to your testimony.
21	EXAMINER NEWMARK: Uh-huh.
22	MR. MILLER: And maybe this would be best
23	handled after cross-examination, but you've asked
24	for an objection and
25	EXAMINER NEWMARK: No. That's

1		MR. MILLER: Maybe I should place it as a
2		standing objection.
3		EXAMINER NEWMARK: No. We can resolve it.
4		MS. KOBZA: Yeah.
5		EXAMINER NEWMARK: I think let's see
6		what we can do.
7	BY M	IS. KOBZA:
8	Q	Mr. Kaempfer, looking at your surrebuttal testimony
9		on page 8.
10	А	Yes.
11	Q	Lines the question beginning on page 7 and going
12		to line or page 8, line 6, with your correction,
13		is the question and answer that you provided there
14		correct in your view?
15	А	Yes.
16	Q	Could you explain what you mean on page 8, line 3,
17		beginning with, this alone should be justification
18		for not using the results of the customer demand
19		study?
20	A	I question the 1,000 gallon per minute reading
21		between the two meters as being a problem. The other
22		exhibit from 2013 appeared to show that it was
23		corrected, but I the concern was two parallel
24		meters reading 1,000 gallons a minute apart. When we
25		reviewed the metering data for all the wholesale

1		customers, we noticed some where the meters tracked
2		identically and then we noticed some where they
3		didn't track identically, and this is the largest
4		discrepancy between the two meters.
5	Q	So just to be clear, you are testifying you are
6		providing the answer on page 7 and 8 in response to
7		the question on page 7, line 14?
8	А	That is correct.
9		MS. KOBZA: So I would I don't know how
10		you want to handle the correction.
11		EXAMINER NEWMARK: Let's leave the filed
12		testimony as is and just work off the transcript
13		will be considered his correction because I think we
14		need to show why Ms. Cramer filed her exhibit in
15		response to Mr. Kaempfer's earlier statement that
16		he's just corrected, at least partially, and you can
17		file let's file Kaempfer 4r as his as his next
18		exhibit, which would be 6.
19		(Exhibit Kaempfer 6 marked for identification.)
20		MS. KOBZA: So you want Exhibit 4r filed
21		as Exhibit 6?
22		EXAMINER NEWMARK: 6, right. And we'll
23		leave his testimony as is, and his surrebuttal,
24		filed surrebuttal, and just accept his correction on
25		the transcript.

1 Do you have any comment on that? We'll 2 see. 3 MR. MILLER: It's difficult not -- it's 4 phrased in terms of a correction, and you get the 5 benefit of reviewing the errata sheet, and I'm just 6 not -- I mean, I guess I would ask for the 7 opportunity to object to the correction, or at least 8 to have the question and answer read back. 9 MS. KOBZA: You may disagree with the 10 answer, but it is Mr. Kaempfer's answer. And, I 11 mean, just as far as the process here, Milwaukee provided or asked for an information request 12 13 yesterday, which then was provided to Mr. Kaempfer. 14 Mr. Kaempfer reviewed the information request. As a 15 result of that, realized the second page of the 16 exhibit was wrong and corrected that. Before he was 17 able to provide that -- which was after the errata 18 sheet was provided. Before he was able to provide 19 that correction on the stand, Ms. Cramer discussed 20 the correction in her testimony, which was perfectly 21 appropriate. 22 MR. MILLER: Well, I understand. 23 MS. KOBZA: But I don't see --24 MR. MILLER: Yeah. 25 EXAMINER NEWMARK: Uh-huh. Yeah, I think

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           this works out in terms of the record. So I'll
           overrule the objection, but I think it's clear what
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           his -- what his -- what the basis of his statement
 4
           is now in terms of the justification of -- oh, his
 5
           criticism of the customer demand studies based on
 6
           the differential of the 1,000 gallon per minute flow
 7
           rather than the other issue he had previously.
 8
           So -- so we'll just move on from there.
 9
                     MR. MILLER: Thank you.
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                     MS. KOBZA: I do think we need to make it
11
           clear.
      BY MS. KOBZA:
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          Mr. Kaempfer, you are not claiming now that Exhibit 4
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           is true and correct?
15
          That is correct.
     A
16
          But you did offer that originally?
17
           I did.
     A
18
           And you are now offering Exhibit 6?
19
          That's correct.
     A
20
          As a replacement for Exhibit 4?
     0
21
     A
          As a correction, yes.
22
                     EXAMINER NEWMARK: Okay. Thanks.
23
     BY MS. KOBZA:
          Okay. Have you reviewed the surrebuttal testimony
24
25
           filed in this proceeding?
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A	I	have

- Q And have you heard the testimony that's been offered here today?
- A I have.
 - Q Do you have any response you would like to make to that surrebuttal testimony or the testimony you've heard here today?
 - I do. I would like to respond to Mr. Granum, page 6, lines 6, 7, 8, and 9. Mr. Granum makes the statement, normally the pauses in data transmission were over a relatively short period of time. So they would require adjustments only if they occurred over a longer period of time or occurred at a time where it would result in a false peak day or hour.

I'd like to point out that he's inferring that the way they corrected data would not have any impact on the results, and I looked at the data for West Pierce Meter Station in the City of West Allis, and there was a gap in the data from August 10th through August 12th, and at the end of the data, the entire flow was reported over a one-hour period.

That's, I believe, a 410-hour period.

The data was then divided by the number of hours and entered into the record or into the -- into the flow metering or the database as a constant flow

for that whole time. What that did was when I looked at the graph, it -- basically they had two meter stations, one was reading correctly, one was reading not. It was then putting a rectangular block of data with no variability and then putting the block of data with variability.

So when you look at the graph, there is —
the flow is varying from 1,000 gallons per minute to
9,000 gallons per minute before the correction. The
data is varying from two — 2,500 to 5,500 using the
average. So it's basically dampening all the data.
This just happened to be over the same time period
that Milwaukee had their peak hour. It also went
into the next day when they corrected the data, was
the maximum day that Milwaukee said West Allis data
was at its maximum day, and what happened was —

MR. MILLER: I'm going to -- I'm going to object. I let the first part of this go because it was directed to a portion of the surrebuttal testimony. I am wondering how much of this, though, is a general critique of the customer demand study, which should be in his earlier stages of testimony.

THE WITNESS: I'm specifically addressing the longer period of time not affecting things.

MR. MILLER: My question isn't posed to

the witness, it's posed to the judge.

EXAMINER NEWMARK: Any response to that?

MS. KOBZA: I believe Mr. Kaempfer responded that his response is to what's in Mr. Granum's surrebuttal at page 6, that a data adjustment doesn't impact the -- wouldn't result in a false peak day or hour.

EXAMINER NEWMARK: Right. I was following along in those lines, believe it or not, so continue with your answer.

THE WITNESS: Thank you. Okay. So on the maximum day reported by Milwaukee, part of the data was the average from this gap in data. It happens that West Allis uses Milwaukee meters on a daily basis to determine the flow into their own system, and the data that they report and the PSC reports is from their — their readings on the Milwaukee meters. They didn't have any gap in their data during this period. They had reported a lower maximum day than what Milwaukee had calculated from the adjusted data, so it does matter.

BY MS. KOBZA:

Q Do you have any other response to the surrebuttal testimony or the testimony offered previously by others?

		37
1	А	Yes, I do. Page 12, lines 8 through 15.
2	Q	This is Mr. Granum's surrebuttal?
3	A	It is. Mr. Granum questions or disagrees with how we
4		set the maximum day of or the maximum hour of
5		Milwaukee Water Works should be calculated. We had
6		stated that the maximum hour should be the sum of the
7		pump stations pumping water into the water
8		distribution system plus amount of water coming out
9		of their elevated storage tanks.
10		Mr. Granum says or states, "The Lincoln
11		and Florist stations and the Hawley and Greenfield
12		storage tanks should be excluded from this
13		calculation because they are simply redistributing
14		water throughout the water system."
15		Water coming from an elevated storage tank
16		into the system is meeting customer demands. The
17		Florist station and the Hawley station both have
18		reservoirs. The pumps are taking water out of the
19		reservoirs, same as the high lift pump stations are
20		taking water out of the reservoirs at the water
21		plants and using it to meet demands in the system.
22		This is the same demands that they're measuring in
23		the wholesale customers.
24		So, for example, if Milwaukee's reporting

160 being pumped out of the water plant and they're

1 also pumping 30 or 40 million gallons at a rate of 30 or 40 million gallons per day out of the ground 2 3 storage reservoirs, and also the water is coming out 4 of the elevated storage tank at a rate of 10 million 5 gallons, that is the rate that is being used in the water system. 6 7 So if Milwaukee is not calculating their 8 maximum hour rate, then none of their ratios are 9 correct, and their proportions of cost being 10 distributed are incorrect. For example, if the 11 wholesale customers max hour total is 50 million 12 gallons a day, Milwaukee's is 150, then they're a 13 third of the maximum hour. If Milwaukee's is 14 actually 200, they're a fourth of the maximum hour. 15 It's a big issue. 16 Do you have any other responses? 17 A No. 18 EXAMINER NEWMARK: Okay, great. Thanks. 19 Well, I think we've gotten to the end of this 20 portion of the hearing. We're going to save 21 cross-examination for after the public session, and 22 we'll be back at 2 o'clock for that. 23 (Break taken from 1:24 p.m. to 2:00 p.m.) 24 (Change of reporters.)

1	EXAMINER NEWMARK: I believe Mr. Kaempfer
2	is up here for cross-examination. Sorry you had to
3	wait so long.
4	CHRISTOPHER KAEMPFER, WHOLESALE CUSTOMER WITNESS, RESUMED
5	MR. MILLER: We have no cross-examination
6	of Mr. Kaempfer.
7	EXAMINER NEWMARK: Anyone else? No?
8	MS. KOBZA: I do have a question for you.
9	Have you decided what you're going to do about
10	Pauly 2? Because if that may be an issue, then
11	Mr. Kaempfer would be able to speak about that.
12	EXAMINER NEWMARK: Let's get off the
13	record for a second.
14	(Discussion off the record.)
15	EXAMINER NEWMARK: We'll excuse you for
16	now and just say you're available for recall.
17	(Witness excused.)
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1		EXAMINER NEWMARK: Who do we have next?
2		MS. KOBZA: Our next witness is Patrick
3		Planton.
4	PATR	CICK PLANTON, WHOLESALE CUSTOMERS WITNESS, DULY SWORN
5		DIRECT EXAMINATION
6	BY M	IS. KOBZA:
7	Q	Could you please state your name for the record.
8	А	Patrick Planton.
9	Q	And by whom are you employed and what is your
10		position?
11	А	Short Elliott Hendrickson Engineering Company. I am
12		the water practice center leader.
13	Q	On whose behalf are you testifying here today?
14	А	The wholesale customer group.
15	Q	Have you submitted written direct testimony dated
16		June 4th, 2014, rebuttal testimony dated June 13,
17		2014, and surrebuttal testimony dated June 20, 2014?
18	A	I have.
19	Q	Is that testimony true and correct?
20	A	Yes.
21	Q	Have you also submitted and offered into evidence
22		Planton Exhibit 1 through 11?
23	A	Yes.
24	Q	Are those exhibits true and correct?
25	A	Yes.

1 0 Have you reviewed the surrebuttal testimony filed in 2 this proceeding? 3 A I have. 4 Have you also heard the testimony offered by other 5 witnesses today? Yes, I have. 6 A 7 0 Do you have any response or comment you would like to make about that surrebuttal testimony or the other 9 testimony you've heard today? 10 A I would. First I'd like to make a correction to my 11 surrebuttal testimony to make sure that's accurate. 12 If you look on page 7, line 19 of my surrebuttal where I make mention about the extra capacity costs 13 14 shifted to wholesale customers by over a million 15 dollars. That's actually only \$800,000. What I had 16 in there was both the transmission and distribution allocations and the customer demand factor 17 18 allocations. So it actually should be 800,000, not a 19 million, so that should be corrected for the record. 20 Q I'm sorry, what page is that? 21 A Page 7 of my surrebuttal, line 19. Line 19. So instead of over one million dollars, 22 23 that should say? 800,000. That's just for the customer demand 24 A 25 factors, not the transmission and distribution

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allocations.

- Q Okay. Do you have any other response you'd like to make to your surrebuttal testimony or what you've heard today?
- A I do, and I know Mr. Kaempfer had touched on this and I'm going to just bring it up again as a point. Mr. Granum's surrebuttal testimony, page 12, the question that starts with line number 8 about responding to Mr. Kaempfer's concern about the use of the Milwaukee Water Works data, particularly the usage of the term max day and max hour. And I actually have no problem with the paragraph answer by Mr. Granum if he would change the one word on line 11 from hour to day, where he says that he calculates the differences are due to supply-side pumpage versus demand-side water use. In calculating the maximum hour for the system, which is used to establish system demand ratios, only water pumped from the source of supply should be included, and they include the following stations that are listed in his surrebuttal testimony.

That's absolutely true for maximum day.

For maximum hour calculations, any water going into
the system -- and this is also what Mr. Kaempfer was
alluding to -- any water coming into the system, we

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make maximum hour calculations, whether from the supply side, pumping stations, the treatment plant, or if it's coming from storage tanks, either by gravity or by re-pumping storage. That's considered to be water that's meeting a peak hour demand. In the same respect, when that peak hour goes down below what the average for the day would be, the utility starts to refill their storage tanks. It's not demand. It's water going back into storage tanks to fill them up for the next maximum day so the next day they could meet that maximum hour should it be needed.

I do have a couple of questions on the testimony today on that -- a couple of them Mr. Granum had mentioned about the 360 retail residential customers being representative and the work that was done to ensure the various meter routes in three of the locations of the city would be representative of what the retail residential customer demand would be. And I commend him for doing that additional work. What's concerning is that representative sample was cut in half to 185 retail residential customers. And from the discussion today, I'm still not clear in my mind where those residential retail customers were taken

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from. What billing district of the three or what actual meter routes other than the list that was provided?

The reason why that's important is because in -- on page 9 of the customer demand study, it's made mention that there are different demand characteristics in the three different areas of Milwaukee. And I guess the wholesale customers want to make sure that once that sample is cut in half, we're still looking at a representative sample of retail residential customers. Because retail has a tremendous amount -- retail residential has a tremendous impact on maximum day demand factors. And consequently, peak hour as well. So that's one of the other concerns we have, of where those actual 185 retail residential customers located on the map on page -- I believe 30 of map 2 of the customer demand study.

One more point, I think Ms. Cramer had mentioned today on the stand about looking at relative ratios of maximum day demand divided by average day demand for a month. For example, the month of July versus that same ratio of the maximum day over the average day per month, say, for example, in December. And our attorney was stating to the

point where there is a lot of discretionary outdoor water use in July that doesn't exist in December.

Indoor water use may not change a lot. Of course, the average in July would go up because some of that outdoor use; but the peak is much higher than the peak would be in December, January, February and March.

That's one of the reasons why people put on sprinkler meters, so that water that's used for irrigation doesn't count against them. If they're not putting it down in the sanitary sewer system, they aren't going to be charged for the sewer charges. Same kind of a concept.

And then lastly, responding to Mr. Pauly,

I think my testimony, rebuttal and surrebuttal, is

pretty clear about the wholesale customers have

facilities in place where they can meet their maximum

day, maximum day plus fire and their maximum hour

demand. And that's why they've installed redundant

pumping facilities, redundant ground storage

reservoirs, redundant elevated storage tanks. And

again, I have an exhibit that goes into very great

detail about how much water is available by the

wholesale customers for maximum day, max day plus

fire and for max hour. That's it.

1		MS. KOBZA: Thank you. That's all.
2		EXAMINER NEWMARK: Questions,
3		cross-examination?
4		CROSS-EXAMINATION
5	BY M	IR. MILLER:
6	Q	Mr. Planton, you said that it was very concerning
7		that the residential customer sample was cut in half
8		you said down to 185 customers. And you said it's
9		very concerning and that this is very important to
10		know where those customers were from. That
11		information, you're not saying that the customer
12		demand study didn't discuss the size of the sample,
13		are you?
14	А	No. That was put in the sample. It started at 360
15		and it was changed down to 185 for I believe
16		Mr. Granum mentioned that it was the best available
17		data that could be obtained.
18	Q	Right. But the customer Trilogy in its customer
19		demand study pointed that out, correct?
20	А	Yes.
21	Q	And you had a copy of the customer demand study?
22	А	Yes.
23	Q	When did you receive a copy of the customer demand
24		study?
25	А	I believe late April or early May.

1	Q	Okay. So late April or early May. But you never
2		requested through the data request process for that
3		information, correct?
4	А	Correct. And some of the testimony that we heard
5		today was the reason for my comment about, you know,
6		Trilogy can't come up with a reason why or where some
7		of those locations were and if they were
8		representative.
9	Q	Okay. But, again, the question was you didn't ask
10		for that?
11	А	I didn't personally, no.
12	Q	Thank you.
13		MR. MILLER: Can I take one moment?
14		EXAMINER NEWMARK: Sure.
15		MR. MILLER: I have no further questions.
16		EXAMINER NEWMARK: Okay.
17		CROSS-EXAMINATION
18	BY M	S. SILVER KARSH:
19	Q	I do have one question for you.
20	A	Good.
21	Q	In your opinion, what sample size would be
22		appropriate in order to derive demand ratios that
23		reflect residential use appropriately?
24	А	Can you be more specific? For New York City or
25	Q	No

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- A -- for the City of Hartford, Wisconsin?
- 2 Q You talked about 185 customers being smaller. So
 3 what led to your opinion in this context here?
 - A Realistically, you know, when they do polling for presidential elections, what is it, 3 or 4 percent, something like that, a much smaller sample size; and there's a lot of scientific evidence about how small a size you should have. I know that what Milwaukee did for residential customers was a fraction of one percent. Me being an engineer, we always like to have more information rather than less and have to make some presumptions that may or may not pan out to be true. But I would say at least a percent or two or more. Probably no more than about four. And that could be very cost prohibitive in a case like this. But what we're trying to do is make an apportionment of costs between retail and wholesale as good as we can. And getting back to the max hour versus max day versus average day, that collecting max day and max hour information off of peak summer seasons is not really relevant to me. What we're trying to do is apportion extra capacity costs and who causes those extra capacity costs to be there. So we're looking at who causes the maximum days to occur, what customer groups or classes; and then the maximum hour

on that maximum day is the most important because, again, we're not concerned about MillerCoors having a peak day or a peak hour in January. They don't cause Milwaukee Water Works to have extra capacity facilities to meet that demand. Now, MillerCoors has a peak hour on July 15th when everybody else in Milwaukee has their maximum day, MillerCoors should be apportioned those maximum hour costs because they're creating the need for Milwaukee to have extra capacity facilities. So I contend that maximum hour should be measured on the maximum day. I've got one data point for maximum day for retail in 2013, and I have one maximum hour that may not even be on the maximum day or even the maximum month. I know Butler's got their maximum hour in April. I don't really care about that.

So that's a long-winded answer for several low percentage to peak ratios to make comparable or credible assertions on demand.

- So in studies that you performed for customer demand ratios, how have you determined sample size for a given utility or area?
- A When we do customer demand studies for master planning purposes, for supply purposes, for storage purposes, we look at primarily the industrial

1 customers and we will actually go and interview or 2 survey or send questionnaires to all the largest --3 depending on the community, largest customers in the community. For example, it would be a good time to 4 sit down with the folks at MillerCoors and find out 5 6 what their demand needs are, are they going to use 7 more water, less water. So primarily we focus on 8 industrial customers, not so much against residential 9 customers. Milwaukee is a little bit different 10 because you've got those three distinct areas that 11 were called out on page 9 of the customer demand 12 study with different water use patterns. And if one 13 of those three areas is overrepresented in that 14 185-person residential sample, we're going to have 15 some results that potentially will be skewed. 16 So do you differentiate between residential demand 17 factors and industrial demand factors? 18 A Yes, absolutely. 19

Q Okay. All right. So what have you done for residential demand factors in determining sample size?

The only thing I've ever done with -- related to residential demand factors has been with military facilities, at Bethesda Naval Hospitals, and for looking at water audits for various communities. The

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1 most recent one we did was for the Village of Howard 2 that is getting very expensive water from the Central 3 Brown County Water Authority. What we do there is 4 not do individual metering of customers. We do a 5 process that's called district metering, district 6 measurements, where we can actually go in and we can 7 create areas of a distribution system that's somewhat homogeneous, residential areas, and actually monitor 8 9 all the water that goes into this district where we 10 can create demand factors for residential customers. 11 We can create diurnal curves for the customers within 12 It doesn't just have to be residential customers. It can be any variety of land uses where 13 14 we can view that information. And that's actual 15 information of the water that's going in, other than 16 the waters that's being lost, that's meeting demand 17 for those customers. So individual customers, no; 18 district metering, absolutely. 19 And do you have direct experience with cost of 20 service study demand factors? 21 A I do. 22 Can you provide any examples?

I've done probably cost of service studies, 10 at

least, less than 20, where we go in and actually on

Schedule 9 of the PSC spreadsheets, and that's where

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those customer extra capacity factors get put in.
And I've been involved in projects where we've had to
put numbers in there.
MS. SILVER KARSH: Okay. Thank you. No
further questions.
THE WITNESS: You're welcome.
MR. MILLER: Could I ask a follow-up based
upon
EXAMINER NEWMARK: Yes.
RECROSS-EXAMINATION
BY MR. MILLER:
Q Have you ever done a customer demand study to
apportion the cost based on current use for rate case
purposes?
A I have not.
EXAMINER NEWMARK: Is that it? Redirect?
MS. KOBZA: No.
MR. MILLER: Sorry, I
EXAMINER NEWMARK: You're not done?
MR. MILLER: Yeah.
Q Have you ever done an analysis that determined how to
select a sample of individual customers so that the
peaking ratios of the sample as a whole is
representative of the peaking ratios of an entire
class?

1		MS. KOBZA: Our next witness is Eric
2		Rothstein.
3	ERI	C ROTHSTEIN, WHOLESALE CUSTOMERS WITNESS, DULY SWORN
4		DIRECT EXAMINATION
5	BY M	IS. KOBZA:
6	Q	Could you please state your name for the record.
7	А	Eric Paul Rothstein.
8	Q	And by whom are you employed and what is your
9		position?
10	А	Galardi Rothstein Group, I'm a principal, Chicago,
11		Illinois.
12	Q	On whose behalf are you testifying today?
13	А	The wholesale customer group.
14	Q	Have you submitted written direct testimony dated
15		June 4th, 2014, rebuttal testimony dated June 13th,
16		2014, and surrebuttal testimony dated June 20th,
17		2014?
18	А	Yes.
19	Q	Is that testimony true and correct?
20	А	It is.
21	Q	Have you also submitted two exhibits, Rothstein 1
22		and 2?
23	А	Yes.
24	Q	Are those exhibits true and correct?
25	А	Yes.

- 1 0 Have you reviewed the surrebuttal testimony filed in this proceeding? 2 3 A I have. 4 And have you listened to the testimony previously 5 offered in this proceeding today? I have. 6 Α 7 Do you have any response or comments you would like 8 to make about that surrebuttal testimony or the oral 9 testimony offered today? 10 I think I just have one point of emphasis, building A 11 on some of the testimony that's been offered by Pat 12 Planton. Specifically I wanted to address this issue 13 about the increases of the number of customers that 14 are drawn from in a sampling. It is no surprise that 15 as you increase the number of customers drawn from a 16 sample that there will be a convergence to a value 17 that is characteristic of that sample. But that's 18 really not the issue that's at play. So this 19 emphasis on, geez, we kept -- we increased the number 20 of customers that we sampled and it -- the results just converged to a defined value is not really all 21 22 that relevant. What's important is the
 - A way to think about this would be to

representativeness of the various samples that are

taken in characterizing the population in aggregate.

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1	think about it in political terms. You can draw lots
2	and lots of customers from Waukesha and you will keep
3	getting republicans. You can draw lots and lots and
4	lots of customers from City of Milwaukee, you'll
5	probably keep getting democrats. And if you draw
6	lots and lots of customers from the communist party,
7	you'll get lots of communists. But the question is
8	whether or not the sample populations collectively
9	will be representative of the population. And that's
10	why there is such a strong concern, for example,
11	about the locus of the samples that are drawn in the
12	residential demand study.
13	MS. KOBZA: Thank you. We have nothing
14	further.
15	EXAMINER NEWMARK: All right. Cross?
16	(Pause.) Mr. Miller, are you preparing a question?
17	MR. MILLER: We have no questions. Thank
18	you.
19	EXAMINER NEWMARK: Go ahead.
20	CROSS-EXAMINATION
21	BY MS. SILVER KARSH:
22	Q I have just a few questions for you. In your
23	opinion, what sample size would be appropriate for
24	demand ratios that reflect residential use
25	appropriately?

1	A	Well, when you do this sort of work, and I have done
2		some of this type of analysis, it's important to do
3		some analytics on the population in aggregate, for
4		just the reasons that I spoke to. So if you've done
5		a lot of analysis about the relative homogeneity of
6		the population in aggregate, then the sample size can
7		be somewhat reduced. I think the types of numbers
8		that Pat was talking about, you know, one to three
9		percent of the customers, is probably reasonable. It
10		might be able to be a bit lower with some
11		demonstrative homogeneity. The demand study even
12		points to the fact that there is some variability
13		within, for example, the residential class. So that
14		would argue for needing to have a bit higher sample
15		size.
16	Q	And in the studies that you've done, how have you
17		determined sample size? How have you determined
18		whether a population is homogenized or more varied?

- whether a population is homogenized or more varied?
- Well, typically you'll look at things like the demand characteristics. So you'll look at billing data, you will look at geographic dispersion, you'll look at density, parcel information, really sort of anything you can get your hands on. Some demographics about the community. And depending on the level of analytical rigor you want to pursue, you can do all

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1		kinds of analytics about that population to try to
2		get a better understanding of what would be the
3		potential drivers for variability in demand
4		characteristics.
5	Q	And do you have any direct experience of conducting
6		studies to develop residential demands factors for a
7		cost of service study?
8	А	Well, yes. I was a project manager while with the
9		City of Austin. And this is a number of years ago.
10		I think this was actually one of the seminal studies
11		of this type of work in the industry, where we did
12		just that, we did the equivalent of load research for
13		water and wastewater for water customers for the
14		City of Austin. I was the client. I was the
15		financial manager for the City of Austin; and we
16		managed a project that involved a statistical
L7		sampling protocol for residential, commercial,
L8		industry, high tech industrial and whole population
L9		sampling for wholesale users.
20		MS. SILVER KARSH: Thank you. No further
21		questions.
22		EXAMINER NEWMARK: All right.
23		MR. MILLER: Can I ask a follow-up off of
24		that line of questioning?
25		EXAMINER NEWMARK: Yes. We inspired you.

1		CROSS-EXAMINATION
2	BY M	MR. MILLER:
3	Q	You said that it was a long time ago. How long ago
4		was that study?
5	А	This is as I said, I think this is somewhat
6		seminal work, so this was back in the early 1990s.
7	Q	But you did not, you did not author the study, did
8		you?
9	A	No. The study was performed by Ch2MHill. Again, I
10		was the client. I worked very closely with the
11		consultants with Ch2MHill to perform the analysis.
12		We also had as part of that team a sub-consultant who
13		was specifically a statistician who helped us with
14		development of the sampling protocol.
15	Q	And that is the only customer demand study that you
16		have been a part of?
17	A	That's the only that's the only one I've managed.
18		I have been involved in other cost of service
19		studies. I can't
20	Q	Not I'm sorry. I don't think I asked for cost of
21		service study. Customer demand study to
22	А	Let me just finish.
23	Q	to allocate cost based on current
24	А	No, I understand what you're saying.
25		(Interruption by the reporter.)

1	Q	Based on current use for purposes of a rate case. So
2		let me, I guess, restate the question. Have you ever
3		done a customer demand study, have you ever performed
4		a customer demand study to apportion costs based upon
5		current use for a rate case?
6	А	So my experience is that I managed the was a part
7		of the management team for the work in Austin, and I
8		have been participated in cost of service studies
9		in which demand studies were performed and I was part
10		of the teams that were involved in that work. I have
11		not personally managed those cost those demand
12		studies for the cost of service study, that were
13		supporting the cost of service studies.
14	Q	Were you involved in those cases in determining the
15		sample size?
16	А	No.
17		MR. MILLER: Thanks. That's all.
18		MS. SILVER KARSH: I do have one
19		additional question.
20		RECROSS-EXAMINATION
21	BY M	IS. SILVER KARSH:
22	Q	What do you believe the level of analytical rigor
23		necessary in order to demonstrate that the demand
24		ratios used in the last cost of service study were
25		appropriate or inappropriate?

1	А	The last cost of service study, is that the 2009
2		case? The last Milwaukee contested case?
3	Q	Yes.
4	А	I don't know. I don't know enough about what the
5		options were to be able to offer an opinion. I
6		would I think that the best thing to be able to do
7		would be to have effective demand metering. We have
8		a you have information that was used, and we
9		looked towards this study as a mechanism to provide
10		improvement. So we have to demonstrate that
11		improvement has actually been accomplished. As to
12		the level of the analytical rigor that was in the
13		previous study, I'm not prepared to comment on.
14		MS. SILVER KARSH: No further questions.
15		Thank you.
16		THE WITNESS: Thank you.
17		EXAMINER NEWMARK: Any redirect now?
18		MS. KOBZA: No.
19		EXAMINER NEWMARK: You're excused.
20		Thanks.
21		(Witness excused.)
22		EXAMINER NEWMARK: Let's move on to
23		MillerCoors. Who's your first witness?
24		MR. WILSON: Our witness Solomon Tesfai,
25		we sent around an e-mail last week asking if anyone

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1		MR. WILSON: We call Philip Hanser.
2		PHILIP HANSER, MILLERCOORS WITNESS, DULY SWORN
3		DIRECT EXAMINATION
4	BY M	R. WILSON:
5	Q	Please state your name for the record.
6	A	I'm Philip Q. Hanser, H-A-N-S-E-R.
7	Q	Mr. Hanser, did you prepare and cause to be filed
8		direct, rebuttal and surrebuttal testimony as well as
9		errata in this case?
10	А	Yes, I did.
11	Q	And if I asked you the questions contained in your
12		direct, rebuttal and surrebuttal testimony today,
13		would your answers be the same?
14	A	Yes, they would.
15	Q	Did you also prepare and cause to be filed Exhibits 1
16		through 9?
17	А	Yes, I did.
18	Q	And is the information contained in those exhibits
19		true and correct to the best of your knowledge?
20	А	Yes, the information is.
21		MR. WILSON: Mr. Hanser is available for
22		cross.
23		EXAMINER NEWMARK: Questions?
24		MR. MILLER: No, none from Milwaukee Water
25		Works. Thanks.

1 EXAMINER NEWMARK: All right. Staff? 2 MS. SILVER KARSH: I have a few questions. 3 CROSS-EXAMINATION 4 BY MS. SILVER KARSH: 5 0 Can you explain in more detail why you're concerned 6 about MWW's main replacement rates? 7 A Well, my concern is, is that there were statements made by MWW with regard to one of the rationales for 8 9 the rate case -- for the increases in the rate was 10 the replacement of the mains. And the information 11 that was provided suggested that the rate of 12 replacement of those mains didn't substantially 13 change between the various changes in their revenue 14 requirements. And so the issue that arose was if 15 you're making this request for increased revenue 16 requirement and the basis for that request is the 17 need to replace mains, then that should have been 18 reflected in the -- in a change of the underlying 19 cost of service. And those revenue requirements 20 essentially didn't change between the prior --21 between filings. 22 Do you know if MillerCoors was affected by the 23 May 17th, 2014, leaks resulting from the treatment 24 plant shutdown? 25 No, I don't. I'm afraid that's a question that you

1		EXAMINER NEWMARK: We'll move on to
2		Commission staff. Who is your first witness for
3		staff?
4		MS. SILVER KARSH: I'm just waiting for my
5		computer to come back. I'd like to call Kathy
6		Butzlaff to the stand.
7		KATHLEEN BUTZLAFF, STAFF WITNESS, DULY SWORN
8		DIRECT EXAMINATION
9	BY M	S. SILVER KARSH:
10	Q	Would you please state your name for the record.
11	А	My name is Kathleen Butzlaff.
12	Q	And what is your position at the Commission?
13	А	I'm an audit manager in the Division of Water
14		Compliance and Consumer Affairs.
15	Q	Did you prepare and cause to be filed direct
16		testimony in this proceeding?
17	А	Yes, I did.
18	Q	And if I were to ask you the same questions today,
19		would your answers be any different?
20	А	No, they would not.
21	Q	And did you prepare and cause to be filed Butzlaff
22		Exhibit 1?
23	А	Yes, I did.
24	Q	And is the information true and correct to the best
25		of your knowledge?

1	A Yes, it is.
2	MS. SILVER KARSH: The witness is
3	available for cross.
4	EXAMINER NEWMARK: All right. Questions?
5	No one? You're excused.
6	(Witness excused.)
7	EXAMINER NEWMARK: I believe Ms. Nieto is
8	not appearing.
9	MS. SILVER KARSH: That is correct. There
10	were no questions anticipated. She filed an
11	affidavit.
12	EXAMINER NEWMARK: Okay. Great.
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1		MS. SILVER KARSH: I'd next like to call
2		Anne Waymouth to the stand.
3		ANNE WAYMOUTH, STAFF WITNESS, DULY SWORN
4		DIRECT EXAMINATION
5	BY M	MS. SILVER KARSH:
6	Q	Would you please state your name for the record.
7	А	My name is Anne Waymouth.
8	Q	And what is your position at the Commission?
9	А	I'm a public utility auditor-advanced in the Division
10		of Water Compliance and Consumer Affairs.
11	Q	And did you prepare and cause to be filed direct,
12		rebuttal and surrebuttal testimony in this
13		proceeding?
14	А	Yes, I did.
15	Q	And if I were to ask you the same questions today,
16		would your answers be the same?
17	А	Yes, they would.
18	Q	And did you prepare and cause to be filed Waymouth
19		Exhibits 1 through 5?
20	А	Yes, I did.
21	Q	And is the information true and correct to the best
22		of your knowledge?
23	А	Yes, it is.
24		MS. SILVER KARSH: The witness is
25		available for questioning.

1		EXAMINER NEWMARK: Questions?
2		MS. KOBZA: We have some cross.
3		CROSS-EXAMINATION
4	BY M	IS. KOBZA:
5	Q	I have a question for you on your surrebuttal
6		testimony. Page 5 going on to page 6. Starting on
7		line 19 on page 5.
8		In your answer to that question, you
9		discussed two different methods of allocating
10		transmission and distribution for utility finance
11		plans; is that right?
12	А	That's correct.
13	Q	Do you given this question that was asked, do you
14		have an opinion on which one of those two methods
15		would be most equitable to all customers?
16	А	No. I think the record provides information about
17		both the benefits and difficulties with each method,
18		and they both have their merits and they both have
19		some difficulties.
20	Q	Do you have an opinion on which one of these two
21		methods would most cost or closely follow a cost
22		causation most yeah, most closely follows cost
23		causation principles?
24	А	No, I don't. Overall, our revenue requirement
25		reflects cost causations, and both of these are

1		methods of allocating those costs and they both have
2		their merits and their difficulties.
3	Q	Well, does the Commission typically use actual costs
4		in allocating costs to customer classes?
5	А	I'm not a rate analyst. The Commission uses actual
6		costs when it comes to developing the revenue
7		requirement.
8		MS. KOBZA: Okay. No further questions.
9		EXAMINER NEWMARK: Other cross?
10		MR. WILSON: I have one question.
11		CROSS-EXAMINATION
12	BY M	R. WILSON:
13	Q	Ms. Waymouth, I'm Joe Wilson on behalf of
14		MillerCoors. In your surrebuttal testimony, page 3,
15		you discuss what would be required in terms of
16		revenue requirement to finance or, excuse me, for
17		a return on rate base to finance 28.3 miles per year
18		of main replacements, right?
19	А	That's correct.
20	Q	Okay. And you suggest that the return rate base
21		would be 7.3 percent; is that right?
22	А	That's correct.
23	Q	Are you intending to submit as an alternative for the
24		Commission's consideration this higher return on rate
25		base in this case?

1	А	No. This is information that would have to be used
2		in conjunction with a knowledge of their long-term
3		financing needs. So I raise the questions about
4		intergenerational equity. So if that was something
5		that was necessary over a long period of time in some
6		future case, maybe that would be reasonable. The
7		purpose here was to point out that one needs to know
8		what the long range plans are in order to put the
9		whole picture together.
10	Q	So your intent in this case was to provide an
11		illustrative example, not to provide an option for
12		Commission adoption in this case; is that right?
13	А	That's correct.
14		MR. WILSON: Thank you. Nothing further.
15		EXAMINER NEWMARK: All right. Redirect?
16		MS. SILVER KARSH: No.
17		EXAMINER NEWMARK: Okay. You're excused.
18		Thanks.
19		(Witness excused.)
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1		MS. SILVER KARSH: I'd like to call Denise
2		Schmidt to the stand.
3		DENISE SCHMIDT, STAFF WITNESS, DULY SWORN
4		DIRECT EXAMINATION
5	BY M	MS. SILVER KARSH:
6	Q	Would you please state your name for the record.
7	А	Denise Schmidt.
8	Q	And what is your position at the Commission?
9	А	I am a program and policy analyst.
10	Q	And did you prepare and cause to be filed rebuttal
11		and surrebuttal testimony in this proceeding?
12	А	I did.
13	Q	And if I were to ask you the same questions today,
14		would your answers be the same?
15	А	They would.
16	Q	Based on your understanding of overall trends in
17		customer demand and retail sales, do you believe that
18		the customer demand ratio derived for the retail
19		class reflects these trends more representatively
20		than those derived by the Black & Veatch 1977 study?
21	А	Yes, I do.
22	Q	Could you please explain why.
23	A	Yes. Given the information that utilities provide us
24		in their annual reports, which is publicly available
25		information, one can observe trends in the service

1		area and residential demands and retail demands and
2		retail sales in general, overall a decline in sales
3		per capita, per customer. And particularly
4		there's been much discussion today on the residential
5		class in particular. And in looking in examining
6		those residential sales, it's pretty clear in the
7		Milwaukee retail area that residential per meter
8		sales have been pretty steady with slight decline;
9		but even during the years there's been discussion
10		about unusual weather years in the extreme weather
11		years, the 2012, 2013, not much variation. This
12		would seem to indicate a reduction in the peak demand
13		ratios is merited and that the direction indicated in
14		the demand study is not unreasonable to take in
15		account in considering cost of in the cost of
16		service study.
17	Q	Given what you've heard in testimony today so far, do
18		you have any anything additional you'd like to add?
19	A	I do not.
20		MS. SILVER KARSH: The witness is
21		available.
22		EXAMINER NEWMARK: All right. Questions?
23		MS. KOBZA: We have a few.
24		EXAMINER NEWMARK: Fine.
25		CROSS-EXAMINATION

1 BY MS. KOBZA: 2 In your role at the PSC, have you studied customer 3 water usage? 4 A Yes, I have. 5 0 Have you studied the reason for peak water usage? 6 Yes, I have. A 7 0 Do you have an opinion about the primary cause of 8 peak water usage for residential customers? 9 Yes, I do. A 10 And what is that opinion? 0 11 A Well, there are two primary reasons for that. One is less discretionary use, which would be indoor use, 12 13 that does not typically generate a peak demand, but 14 rather an increase in demand over the average of the 15 year. And then the primary driver on peak demand is 16 indeed the discretionary use which is typically outdoor water use in our state. 17 18 Would you agree that the amount of outdoor water use 19 done in a community may vary from year to year based 20 on weather? 21 A I do agree. 22 Would you expect that peak water use for residential 23 customers would be higher in hot, dry years? 24 A Yes, I would. That's why it's interesting to note, 25 and I think Mr. Rothstein aptly pointed out, that

1 demographics are important, an important factor. so what I've observed in some communities is that 2 3 that difference -- I looked in particular at 2011 to 4 2013 trends; and in some communities there was a huge 5 increase in residential per meter demand, in others 6 not so much. Interestingly, Milwaukee's demand on 7 the residential side was not particularly higher in 2012 compared to 2011 and, then again, compared to 8 2013. 9 10 And is that average day water use? What water use 11 were you looking at for the City of Milwaukee? 12 I was looking it -- well, the information that's A publicly available to us is the annual demand. I 13 14 also looked at month-to-month pumpage; but that of course is reflecting industrial, commercial, 15 16 residential, public authority use. So just taking up 17 the residential piece, I have -- you know, that's 18 annual data. 19 So you don't have data about summer in particular by, 20 like, your residential class? 21 A Correct. By class I do not. 22 If in a demand study, the goal was to come up with a 23 typical year, would you say 2013 would be that year? Based on -- ? 24 A 25 Based on weather and precipitation, water use,

1 anticipated water use.

- A Yes. Although I have to add that I'm becoming increasingly skeptical of anything defining a typical year for weather.
- Q If we were to use -- if demand factors were going to be based upon 2013 for the residential customers, do you think it would be equitable to base demand factors for the wholesale customers also in 2013?
- A Yes. I mean, typically speaking, I think you'd want to look over the same time period. However, when you look at the drivers of demand in any given system, in that residential really does drive up peak demand, and observing that the Milwaukee retail is not particularly peaky on the residential side as a class, I would say that that typical year is in question.
- Q Do you know, though, whether the Milwaukee residential class is typically peaky since you indicated you don't have any summer information for the residential class?
- A Yes. I'm sorry. I'm saying in average. I do

 believe that, however, our average annual data that

 was revealed in 2012 is pretty indicative of what

 happened during that summer. And that would indeed

 be the peak period.

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- 1 Of 2012 or 2013?
 - 2012. And I think -- so I know there's been a lot of A discussion about throwing out 2012 data. However, I think -- and when you're looking at customer demand, it was very revealing in terms of how water is used
 - For the residential, Milwaukee residential demand factors, my understanding is that only 2013 information is used. Is that your understanding also?
 - A I believe there was some 2012 data as well.
- 12 Do you have the copy of the report?

in different communities.

- 13 A Yes.
- 14 Let's see. Maybe page 93. About in the middle of 15 the page, since more than one ratio. Do you see that 16 sentence?
- 17 No. Oh, now I see it. Yes. A
- 18 So the highest of the three ratios, do you know what time period that was based on? Didn't you hear 19 20 testimony earlier today that that was from July 14th 21 to August --
- 22 A That was 2013.
- 23 0 2013?
- 24 A Um-hmm.
- 25 So for residential customers we're just using 2013

1 data, right? For this piece of the analysis. 2 A 3 Okay. Looking at the top of page 93. 0 4 A Yes. 5 0 Would you agree that what we're trying to calculate 6 for is the ratio that's listed on the left hand of 7 that side, maximum day per year over average day per 8 year? 9 A Yes. 10 If we assume that the sampling captured the maximum 11 day for the year for that 185 customers, we would 12 have the numerator of that ratio, would you agree? 13 I would agree. A 14 And would you agree that we could come up with the 15 average day for the year for those same 185 customers 16 by taking the annual water use for those customers? 17 A Yes. 18 Is there any reason that that wouldn't be a 19 reasonable way to calculate the maximum day for year 20 over average day for year for those 185 customers? 21 A That would not be unreasonable. Do you believe it would be reasonable? 22 Q 23 I believe it's a reasonable alternative. A 24 Looking -- staying on page 93, the second sentence 25 starting an important assumption. Do you see that

1		sentence?
2	А	Oh, yes.
3	Q	It says, "An important assumption that the analysis
4		makes is that peak usage ratios within any given
5		period during the year, month or quarter are fairly
6		constant compared to the peak ratios within any other
7		period."
8		Given your testimony that outdoor water use
9		is a driver for residential water use, would you
10		agree that that is do you believe that that
11		assumption
12		MR. MILLER: I'm going to object to that.
13	Q	is reasonable?
14		MR. MILLER: I don't think that
15		characterized the testimony for Milwaukee from the
16		witness.
L7		MS. KOBZA: I'm taking Ms. Schmidt's
L8		testimony where she indicated that she believed
L9		outdoor water use was the driver of peak water use.
20		It was her earlier testimony.
21		EXAMINER NEWMARK: Overruled.
22	BY M	S. KOBZA:
23	Q	Do you agree with that or do you believe that
24		assumption is accurate?
25	A	I don't have an opinion on that.

1	Q	Do you have an opinion on whether the 185 the			
2		sampling pool, the 185 samples, that sampling pool			
3		that Milwaukee used is representative of Milwaukee's			
4		residential customer group as a whole?			
5	А	I believe in general that it is possible to derive			
6		representation of a greater population based on a			
7		much smaller sample set. And anything north of 30 in			
8		general can be representative, yes.			
9	Q	But I'm not I'm not talking about the size or the			
10		number. I'm talking about the makeup. Would you			
11		think that any would your opinion be that any 30			
12		customers in the City of Milwaukee or 100 customers			
13		in Milwaukee would be representative of the Milwaukee			
14		residential customer class as a whole?			
15	A	No. But I do believe that the customer demand study			
16		sampling methodology addressed that issue.			
17	Q	Do you understand from the methodology where the 185			
18		customers came from?			
19	A	That is not entirely clear to me, how it went from			
20		360 to 185.			
21	Q	Looking again at page 93. My understanding is that a			
22		seasonal peaking factor was used in the calculation			
23		in the demand study, and that the seasonal peaking			
24		factor used was for the system as a whole as opposed			
25		to the residential class in particular. Is that your			

1		understanding?			
2	A	That was my understanding from this morning's			
3		testimony, yes.			
4	Q	Would you expect the seasonal peaking factor for the			
5		system as a whole to be lower than the seasonal			
6		peaking factor for the residential class by itself?			
7	A Actually, I'm not sure of that. Again, looking at				
8	8 some more recent data on an annual basis, I'm not				
9		sure I could I would draw that conclusion without			
10		doing further analysis.			
11	Q	If staying on page 93, right below that, talks			
12		about data for maximum hour?			
13	А	I'm sorry, right below what?			
14	Q	Right below the I'm sorry. The last two sentences			
15		on page 93.			
16	А	Beginning with which sentence?			
17	Q	Because there are no data for any seasonal			
18		characteristics for peak hourly usage, the same			
19		seasonal factors as those used for the max day,			
20	average day ratio tested calculations would be used				
21	to calculate reasonable max hour, average day ratios				
22	peak customer class. And then it says, "This assumes				
23	that the relationship between the maximum hour usage				
24	and the maximum daily usage remains constant				
25		throughout the year, a common assumption in			

	0/25/2011	rage 100					
1	determining peaking factors." Do you have an opinion						
2	on the reasonableness of that last sentence?						
3	A	A I do not.					
4	Q	Have you looked at the max day the retail max day					
5		factors for other Wisconsin communities?					
6	А	Retail max day?					
7	Q	Q Retail max day.					
8	A I have not.						
9		MS. KOBZA: That's all I have.					
10		EXAMINER NEWMARK: Okay. All right.					
11	Where are we, other cross? No? I guess not. No						
12	cross?						
13	MR. MILLER: Just one question.						
14		CROSS-EXAMINATION					
15	BY MI	R. MILLER:					
16	Q	Does the and I'm actually looking at page 93.					
17	Does the demand study include 2012 data in the						
18		seasonal factors for the retail classes?					
19	А	I believe it does.					
20		MR. MILLER: Thank you. That's it.					
21		EXAMINER NEWMARK: Redirect?					
22		MS. SILVER KARSH: No.					
23		EXAMINER NEWMARK: All right. You're					
24		excused.					
25		(Witness excused.)					

1		MS. SILVER KARSH: I'd like to call Sam				
2	Shannon to the stand.					
3	SAM SHANNON, STAFF WITNESS, DULY SWORN					
4	DIRECT EXAMINATION					
5	BY M	IS. SILVER KARSH:				
6	Q Would you please state your name for the record.					
7	A Sam Shannon.					
8	Q And what is your position at the Commission?					
9	A I am a rate analyst.					
10	Q	And did you prepare and cause to be filed rebuttal				
11	testimony in this proceeding?					
12	A Yes, ma'am.					
13	Q And if I were to ask you the same questions today,					
14	would those answers be the same?					
15	А	Yes, ma'am.				
16	Q Have you had an opportunity to review the surrebuttal					
17	testimony in this case?					
18	А	Yes, ma'am.				
19	Q And also listen to testimony throughout the day?					
20	A Yes.					
21	Q In Ms. Lewis's surrebuttal testimony, on page 4, line					
22		13, she discusses storage capacity for fire				
23		protection and quotes a statement you made in				
24	rebuttal testimony regarding ISO not representing					
25	total capacity of a water distribution system. Would					

you like to comment on that?

A Yes. My response is that, in addition to that, to clarify that, in a cost of service study, the fire flow is not meant to represent the actual firefighting capacity in the utility system as well.

Rather, it's a number that is used to create a separate allocation shared by all customers for the benefit of having excess capacity available to fight fires across the entire system. The ISO basic fire flow is their term that is used to define the minimum fire flow that a customer should expect at their location throughout the system. The actual fire flow needs or available capacity at those locations will, of course, vary throughout the system. But the base fire flow is a benchmark that can be used.

Since all customers share the PFP allocation, setting the fire flow at a systemwide expectation is reasonable. Therefore, that's why I offer to use that benchmark in my previous testimony as a more equitable means of basing the PFP allocation.

- Q Would you like to add anything further?
- 23 A No, ma'am.

MS. SILVER KARSH: The witness is available for questioning.

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1
                     EXAMINER NEWMARK: Okay. Ouestions? No?
 2
           All right. Thanks. You're excused.
 3
                     (Witness excused.)
 4
                     EXAMINER NEWMARK: That's the balance of
 5
           witnesses. I'm correct, right?
 6
                     MS. SILVER KARSH: Yes.
 7
                     EXAMINER NEWMARK: Yes. Okay. Let's get
 8
          off the record.
 9
                    (Discussion off the record.)
10
                       (Brief recess taken.)
11
                       (Change of reporters.)
         CHRISTOPHER KAEMPFER, WHOLESALE CUSTOMERS WITNESS,
12
13
                         PREVIOUSLY SWORN
14
                     EXAMINER NEWMARK: Okay. Sir, remember
15
          you're under oath.
16
                     THE WITNESS: Yes, sir.
17
                     EXAMINER NEWMARK: And we will recall some
18
          witnesses to correct some disputes on exhibits and
19
          correct some testimony, so let's do that. Without
20
          any further adieu, go ahead.
21
                        REBUTTAL EXAMINATION
22
     BY MS. KOBZA:
23
         Mr. Kaempfer, do you have a correction to your
24
          surrebuttal testimony on page 10?
25
          Yes.
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1	Q	And on the line line 5 to line 8 with the sentence			
2		beginning, an e-mail from Milwaukee Water Works'			
3		attorney, would you like that sentence stricken?			
4	A	Yes, please.			
5		MS. KOBZA: That is it for the			
6		corrections.			
7		EXAMINER NEWMARK: Okay. Great. So we			
8		just need to refile that.			
9	MS. KOBZA: Do you want that one refiled,				
10	because we didn't refile the other correction we				
11	made to his testimony?				
12	EXAMINER NEWMARK: Well				
13		MS. KOBZA: Perhaps yes.			
14		EXAMINER NEWMARK: This one, yes.			
15		MS. KOBZA: Do you want to address the			
16		other exhibit, admission of that?			
17		EXAMINER NEWMARK: Sure. Yeah, I'll let			
18	you guys just go at it.				
19	MS. KOBZA: Well, I wouldn't generally ask				
20	questions about the exhibit unless it was in				
21	evidence.				
22		EXAMINER NEWMARK: Okay. Well, let's do			
23		it as an offer of proof for now, and so you can go			
24		ahead and ask him.			
25		MS. KOBZA: Okay. All right.			

1 BY MS. KOBZA:

- Q Mr. Kaempfer, have you seen what has been marked as
 Pauly Exhibit 2?
- 4 A Yes.

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- 5 Q Do you have any comments about that document?
- 6 A Yes, I do.
- 7 Q Could you please provide those?
 - A Yes, I will. This is supposed to indicate what
 Milwaukee can provide, max day plus fire flow to each
 wholesale customer, and what it does is it says
 Milwaukee can provide a certain volume of water and
 the Milwaukee water system at 20 PSI at the
 connection point to the wholesale customer. It does
 not indicate that the wholesale customer can use this
 water.

And I'd like to just explain my reasoning on that. We'll use Butler for one example, and it says the calculated flow at the 16-inch main that serves Butler is 4 million gallons per day. Now Butler reached -- at 20 PSI. Now Butler receives its water through a control valve and a flow control valve, and there is, I believe, about 20 pounds of pressure, and if I had time, I would give you the exact numbers, but there's very low pressure available at the point where the flow enters Butler

through the meters, and there is no -- there is not -- if -- if there -- if Milwaukee pressure drops below the valve, there is no flow into Butler. So they can deliver it into their system. They cannot deliver it into Butler's system because they aren't demonstrating they have enough pressure.

The same thing is true in Greendale, and I have a little better feel for that. There is about 40 feet of head available to drive water into Greendale's system, and at the main -- at the main metering point when it's connected to the southwest district, that would be about 65 -- I believe 65 pounds of pressure. That forces the water through the valve. If the pressure is only 20 PSI, the pressure in the Milwaukee system would be below the hydraulic grade line in Greendale, and there would be no flow into Greendale.

So they say they can deliver it at a 20 PSI pressure, but they really cannot deliver it at a usable pressure. This just shows that if there was fire right at the connection to Greendale or Butler, Milwaukee could fight the fire at that point. It doesn't say that the water can actually get into any of the wholesale customers.

They -- another example is Shorewood.

Shorewood has two pressure reducing valves. They maintain a constant pressure on the Shorewood side of the system, and then the available fire flow is how much water can go from -- say, they maintain a pressure of 65 PSI to 20 PSI in Shorewood's system. It doesn't matter if Milwaukee's pressure on the other side is 50 PSI or 100 PSI, Shorewood's flow is governed by Shorewood's facilities.

And that was the point of my original testimony saying that we aren't disputing that
Milwaukee has a huge system and has huge capacity to provide water in Milwaukee. We're saying that the wholesale customers don't -- Milwaukee doesn't provide the wholesale customers the ability to use the water. They all have pumps or flow control valves or pressure reducing valves that basically govern how much water can come into Milwaukee -- or into those customers.

I would like to talk about New Berlin also. They have a -- they have a demand limit.

It's not a limit. They have a demand -- they are guaranteed six-and-a-half MGD with no penalty, and they have a \$10,000 an hour penalty for -- for demands exceeding the six-and-a-half MGD for I think over 10 minutes, okay? Because of that huge

financial penalty, they have set their pumps so that pumps will not operate over 6.4 MGD. Now these are automated systems, and they do not know the difference between a water main break, a fire, or demand.

So in the case of New Berlin, again, it doesn't matter how much of water Milwaukee has available, they have created a situation where it is not available. They only -- they only have six-and-a-half MGD available.

We have also done modeling on Greendale, and we created maps of Greendale showing the available fire flow. We started out with just Greendale with their proposed 750,000 gallon elevated storage tank, and it showed that there were areas of Greendale that the distribution system could deliver 500 gallons a minute, 2,000 gallons a minute, 3,500 gallons a minute, 4,000 gallons a minute. We then added the flows that come through the flow control stations, and we went up in increments, and it basically showed that it didn't really matter. Even if we could get more water from Milwaukee, it really didn't change the available fire flow in the community.

So those are -- to me, this shows that

1	Milwaukee has a very strong system, and they can					
2	deliver large quantities of water out to various					
3	points in their system, but it doesn't demonstrate					
4	the wholesale customers get any benefit from it.					
5	MS. KOBZA: Thank you. That's all I have.					
6	EXAMINER NEWMARK: All right. Any					
7	questions?					
8	MR. MILLER: I have no cross.					
9	EXAMINER NEWMARK: All right. Anyone					
10	else?					
11	MS. SILVER KARSH: No.					
12	EXAMINER NEWMARK: Thanks. You're					
13	excused. We don't need him back now, do we? Or we					
14	may?					
15	MS. KOBZA: Well, only					
16	MR. MILLER: Well, counsel is reserving					
17	the opportunity should I call Mr. Pauly.					
18	EXAMINER NEWMARK: Okay. We don't know					
19	that.					
20	MS. KOBZA: Yes. That's what I meant to					
21	say.					
22	EXAMINER NEWMARK: Yes. Glad we agree.					
23						
24						
25						

1	EXAMINER NEWMARK: All right. So who's				
2	next.				
3	MS. KOBZA: Patrick Planton.				
4	PATRICK PLANTON, WHOLESALE CUSTOMERS WITNESS,				
5	PREVIOUSLY SWORN				
6	EXAMINER NEWMARK: You're still under				
7	oath.				
8	THE WITNESS: This thing?				
9	EXAMINER NEWMARK: Yes, you got it.				
10	REBUTTAL EXAMINATION				
11	BY MS. KOBZA:				
12	Q Mr. Planton, have you had an opportunity to review				
13	what was provided to you as Exhibit Pauly 2?				
14	A I have for a very limited time, but I have looked at				
15	it.				
16	Q Do you have any comments on that document?				
17	A Just a few more. Some might be redundant with				
18	Mr. Kaempfer's, but his points were basically the				
19	ones that I'm looking at this information.				
20	One question that I would have, not that				
21	I'm doubting the veracity of the information that was				
22	provided, but one of the questions I have for				
23	Mr. Pauly is the exactly the type of testing you				
24	did to come up with the data in the field. That				
25	would be good to know. Then again, it looks like you				

have verified it with your calibrated hydraulic computer model, which is also pretty good.

Just to re-enforce what my statement was before is that the wholesale customers really only need the maximum daily demand for supply. They don't need max day plus fire. They have their own systems that will provide for fire protection, storage and pumping in their distribution system. Likewise, they don't need maximum hour. That's also taken care of by their storage facilities, their ground reservoirs, pumping and distribution system, just max day.

Looking at a couple examples, Mr. Kaempfer mentioned a few. The repumping situation, a good example is Wauwatosa. According to the exhibit, looks like Milwaukee can provide almost 30 million gallons per day as a flow for Wauwatosa. And based on my Exhibit No. 6, looking at max day plus fire, what Wauwatosa needs is just over 14 million gallons per day as a flow rate. They don't need the other 16 million gallons a day as a flow rate. There's nothing they can do with it, and that kind of reiterates what Mr. Kaempfer said.

 $\label{eq:Another example would also be Greendale,}$ and I think Mr. Kaempfer's very familiar with, and I

1 think there was a lot of testimony in the last rate case and this one, again, about Greendale and their 2 3 ability to take water and use it. Milwaukee, by their exhibit, says that they can deliver at 20 PSI 4 5 of pressure to Greendale 32 million gallons per day 6 of water. That's almost enough water that would 7 serve the maximum daily demand for all nine of the wholesale customers. Their maximum daily demand in 8 9 2012 was about 40. There's no way that Greendale 10 needs that kind of water. There's nothing they can do with it. It's an insurance policy that they 11 12 don't need and they shouldn't have to pay for, even 13 though the water -- the water quantity is available. 14 But if it was like Shorewood or the east 15 pressure zone of West Allis that actually does take 16 water directly from Milwaukee into their system, we 17 might have a different debate, but for the vast majority of the wholesale customers that are taking 18 19 water of Milwaukee, all they need is max day. 20 And those are the extent of my comments. 21 EXAMINER NEWMARK: Okay. 22 MS. KOBZA: I have nothing further. 23 EXAMINER NEWMARK: All right. Questions 24 from Milwaukee?

CROSS-EXAMINATION

25

1	BY	MR.	MILLER

- Q Is it -- when you're talking about capacity on the wholesale customer end in your examples.
- A Uh-huh.
- Q Are you saying that the wholesale customers don't need max day plus fire?
 - A They don't. They need max day, that's it.
 - Q What if the -- does that assume that a fire occurs when the tanks are full?
 - Nope. My exhibits in my direct testimony allude to the fact that I went through a supply storage analysis for all eight of the wholesale customers, not including Mequon, and it shows how much water would be required for meeting that peak hour above the max day demand rate coming from Milwaukee. It also indicates how much fire protection would be needed.

Now the numbers I have in those tables are from the original cost of service, not with Mr. Shannon's up to an additional 3,500 gallons per minute. But even so, you can see the vast amount of storage that's available, that they could meet a fire after exhausting their peak hour storage in their tanks.

That's how we size storage tanks as

1	engineers. We look at what's needed to meet that			
2		peak hour above the maximum day demand flow coming		
3		into the system from wells or from surface water or		
4		from the wholesale supplier, and then I actually even		
5		added an additional 15 percent on top of that for		
6		operating their tanks with their pumps if they want		
7		to do a little bit of off-peak pumping, those kind of		
8		things, so		
9	Q	Okay. And then specific		
10		MR. MILLER: I don't have any further		
11		questions.		
12		EXAMINER NEWMARK: Okay.		
13		MR. WILSON: I have a question.		
14		EXAMINER NEWMARK: Go ahead.		
15		CROSS-EXAMINATION		
16	BY M	R. WILSON:		
17	Q	When you say that the wholesale customers don't need		
18		or don't depend on Milwaukee Water Works for max hour		
19		or for fire suppression		
20	А	They do for max day.		
21	Q	Okay.		
22	А	But not max hour and not for fire flows.		
23	Q	Right. Doesn't that assume that at the time a fire		
24		breaks out, their storage tanks are full?		
25	А	No.		

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- 2 A No.
- 3 Q Explain that.
 - Doard, but when you look at storage, there's really three categories of storage. When we look at sizing tanks, we look at sizing storage for a system. And this is redundant, but just bear with me. We look at the amount of water that's necessary for that peak hour event, late afternoon, early evening, middle of summer, when a community can only provide so much water on a daily basis, that average flow throughout the whole day. They're not going to size their supply facilities to meet that max hour, because they can take that water from storage.

Contrast that to electric utilities. They have no means of storing electricity, so electric utilities have to provide maximum hour demand, and that's why peak shaving is so important for electric utilities, keep those peaks down, because the next time they have to add generating capacity, it's \$500 million or something like that.

Water utilities are different. We can take water out of storage, and it can occur after we've had the peak hour period in the afternoon and

we have a fire at 10 o'clock at night. There's still water in that storage tank. The storage tanks are not designed just for that peak hour amount, but the peak hour volume, the fire protection volume, then also another volume so they can run their pumps on and off over the top of the tank, how they turn on and off their booster pumps, their high service pumps.

So in answer to your question, Mr. Wilson, they can have a fire event after their maximum hour event has taken place and still have water leftover. And in Exhibit 6 or 7 of mine from my direct testimony shows that the vast majority of wholesale customers have an abundance of storage available in multiple facilities. So even if a storage facility is down for painting -- typically people don't paint their tanks in summertime for that exact reason. The peaks happen in the summertime, max hour, max day, so that's why communities like to take their tanks out of service in the spring or fall to paint them to alleviate that problem.

Same thing with pumps. The common practice is not to take supply pumps out of service in the summertime for that same reason. Now pumps can fail, but there's redundancy built into every

1 system so you can still provide your maximum daily 2 demand assuming your largest unit is out of service. 3 Milwaukee does the same thing. 4 Milwaukee's a little bit different because we're 5 talking about tremendous excess capacity. If Milwaukee was looking at having to add additional 6 7 water supply facilities, we'd be having a completely different discussion here, but Milwaukee has water to 8 9 sell to any number of communities and have water 10 leftover. 11 You know, Waukesha approached Milwaukee. 12 Waukesha's maximum daily demand is 10 million gallons 13 per day, and Oak Creek can barely serve that demand. 14 Milwaukee could serve, with their excess capacity, 20 15 Waukeshas. 16 MR. WILSON: Nothing further. 17 EXAMINER NEWMARK: That's it. Anything 18 else? (No response.) No. Okay, you're excused. 19 (Witness excused.) 20 21 22 23 24 25

1	EXAMINER NEWMARK: And Mr. Pauly, do we		
2	need him?		
3	MR. MILLER: We are going to call		
4	Mr. Pauly.		
5	PATRICK PAULY, MILWAUKEE WATER WORKS WITNESS,		
6	PREVIOUSLY SWORN		
7	EXAMINER NEWMARK: That's okay. Remember,		
8	you're still under oath.		
9	THE WITNESS: Yes.		
10	REBUTTAL EXAMINATION		
11	BY MR. MILLER:		
12	Q Mr. Pauly, would you like to respond about to the		
13	comments made by Mr. Planton and Mr. Kaempfer to		
14	Exhibit Pauly 2?		
15	A Yes, yes. Briefly.		
16	In response to Mr. Kaempfer, I'd merely		
17	like to point out that the fire flow testing numbers		
18	are a measure of the strength of our system, and		
19	there's no intent to imply that we'd be supplying		
20	these flows at 20 pounds of pressure.		
21	As the caveat states, our systems		
22	operation staffs would adjust pumps to supply the		
23	strength and the pressure and to supply more water,		
24	so that's only my only statement on that.		
25	I would like to respond to Mr. Planton in		

that in Mr. Kaempfer's examples for all wholesale 1 2 communities, he states that in response to a fire 3 flow condition, the tank levels would drop and the wholesale community would either open a flow control 4 5 valve or turn on a pump and begin to withdraw water from the Milwaukee Water Works' system. So he 6 7 failed to point out that his calculations show they 8 have the capacity, but they are also relying on 9 supplementary water from the Water Works' system in 10 response to that fire flow condition. 11 MR. MILLER: And for the record, we did move the exhibit in. If I need to move it again, I 12 13 will. 14 EXAMINER NEWMARK: No. 15 MR. MILLER: Okay. 16 EXAMINER NEWMARK: I think it's in by 17 agreement. 18 MR. MILLER: Okay. 19 EXAMINER NEWMARK: And there's been cross, 20 so we'll count it in as of now. 2.1 I just wanted to know if we can clarify 22 something about Shorewood. I think Mr. Kaempfer 23 mentioned that -- let's see if I can remember this 24 correctly -- that there was an issue with Shorewood,

that it -- that there was a problem with the system

6/25/2014 CORRECTED Technical Session Hearing, Volume 2 in terms of supplying Shorewood fire protection, but I see on the exhibit that it says -- you know, the last two columns for Shorewood, it says not supplied and not available for the flow amounts. Is that -does that indicate what he was trying to say, his criticism, something that Shorewood wouldn't work in this and -- but the exhibit says that it's, you know -- you're not claiming that you're supplying or that you can supply the max day and fire flow for Shorewood according to this? THE WITNESS: Well, under -- Planton 6 didn't include the max day demand for Shorewood, so I was a little confused by Mr. Kaempfer's statement in regards to those numbers as well.

EXAMINER NEWMARK: Okay. All right. And I guess just in terms of the 20 PSI, were you -- so you're saying that you could supply a community with greater pressure depending on the situation, just you ramp up that pressure?

THE WITNESS: Yes.

EXAMINER NEWMARK: Okay.

THE WITNESS: Through system adjustments.

And Mr. Planton questioned our fire flow testing program, and I can comment on that as well. We perform approximately 140 fire flow tests per year.

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We have 700 active tests in the system, which means they're on a five-year rotation. Our field person that performs the test is very experienced, very reliable, and very diligent.

EXAMINER NEWMARK: So why did you use the

EXAMINER NEWMARK: So why did you use the 20 PSI if, for example, with Glendale, I believe, or Greendale, was -- needed more -- you need more pressure to pass water through that meter, more pressure than 20, is that what you're saying?

THE WITNESS: Are you referring to the two flow control stations that are in service in Greendale currently that Mr. Kaempfer was speaking of?

EXAMINER NEWMARK: Mr. Kaempfer was saying that, you know, certain -- these communities, you need more pressure to overcome -- overcome the flow, get the water into -- to pass the meter, pass to the wholesale customer is more than 20 PSI, is that --

THE WITNESS: Yes, that is correct.

EXAMINER NEWMARK: Okay.

THE WITNESS: And they do currently have more than 20. 20 is the DNR -- DNR standard for the amount of flow that can be provided to -- as I said, to show the relative strength of the system. So we reduce everything to the flow, the calculated flow,

1	that could be provided at 20 PSI. It doesn't
2	represent actual pressures in the system.
3	EXAMINER NEWMARK: Okay. So your typical
4	test assumes 20?
5	THE WITNESS: We run a test. We measure
6	flow. We monitor pressure. We monitor pressure
7	before and after the flow. Then we take those
8	results, and so those results don't go down to 20.
9	We bring those results back to the office, and we
10	calculate how much flow would be available at 20
11	PSI.
12	EXAMINER NEWMARK: Okay. All right. Any
13	other questions? (No response.)
14	All right. So I think we're done with
15	Mr. Pauly.
16	MR. MILLER: Right.
17	EXAMINER NEWMARK: So you're excused.
18	THE WITNESS: Thank you.
19	(Witness excused.)
20	EXAMINER NEWMARK: And
21	MR. MILLER: We're done.
22	EXAMINER NEWMARK: You're good?
23	MS. KOBZA: We're good.
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1	EXAMINER NEWMARK: So we have one more		
2	remaining issue, the customers		
3	MS. KOBZA: The 185.		
4	EXAMINER NEWMARK: The 185, yeah.		
5	MR. MILLER: Right.		
6	CARRIE LEWIS, MILWAUKEE WATER WORKS WITNESS,		
7	PREVIOUSLY SWORN		
8	EXAMINER NEWMARK: Okay. Ms. Lewis,		
9	you're still under oath.		
10	THE WITNESS: Thank you.		
11	EXAMINER NEWMARK: Okay.		
12	MR. MILLER: The question was asked or		
13	the request was made earlier today to provide 185		
14	the annual water usage for the 185 customers used in		
15	the sample.		
16	MS. KOBZA: The 2013 one.		
17	MR. MILLER: The two right. Not 2012		
18	and 2013, but 2013.		
19	THE WITNESS: So, I mean, we obviously		
20	have the account number. We have the address that		
21	was used in the data set. We can tell you what		
22	route number they're in, so which little of the		
23	little yellow, you know, ones that you filled in, in		
24	which of those meter reading routes they are.		
25	The we don't read every single meter in		

1 the system on January 1st and December 31st, but I 2 can easily give you the four billing cycles that 3 include whichever year you just said it was. '13, 4 right? 5 MS. KOBZA: 2013, yes. 6 THE WITNESS: For each of those accounts. 7 It would take a day or two to pull it together but, 8 yes, it can be done. 9 MS. KOBZA: So when you say the four 10 billing cycles, that would be -- it would include, 11 you know, maybe January 15th to January 15th or 12 something? 13 THE WITNESS: Right, right. 14 MS. KOBZA: Yeah, that's fine. 15 THE WITNESS: It might include the 16 December before and the January after. 17 MS. KOBZA: That's fine. As long as it's 18 the 12-month period. 19 THE WITNESS: Yep. Can do. 20 EXAMINER NEWMARK: Okay. And in terms of 21 customer information, I mean, we could -- you could 22 file all the information confidentially or -- and 23 then there will be a redacted version, or do you 24 need customer information, personal information for 25 this purpose or indirect --

1	THE WITNESS: Can you just use the route		
2	numbers? If we could even divorce the address from		
3	it, then we will comply with Act 25, I think. If		
4	the route number and the billing data would do it		
5	for you. It doesn't tie it to any specific account		
6	or address that way. You know, number 1, 2, 3, 4,		
7	5, 6, 7, 8, 9, 10, the route and the corresponding		
8	meter reads.		
9	MS. KOBZA: I think that's a reasonable		
10	way to go.		
11	EXAMINER NEWMARK: Okay. All right. So		
12	we know what we're doing then?		
13	THE WITNESS: Yep.		
14	EXAMINER NEWMARK: All right. So in the		
15	next few days?		
16	THE WITNESS: Absolutely.		
17	EXAMINER NEWMARK: Great. Okay. Thanks.		
18	(Witness excused.)		
19	EXAMINER NEWMARK: All right. So any		
20	other loose ends? (No response).		
21	It doesn't look like it. All right.		
22	Well, I don't think there's any other announcements		
23	we need. We have a briefing schedule?		
24	MS. SILVER KARSH: Yes.		
25	EXAMINER NEWMARK: All set, yeah. Okay.		

1	STATE OF WISCONSIN)
2	MILWAUKEE COUNTY)
3	
4	We, JENNIFER M. STEIDTMANN, RPR, CRR,
5	Registered Professional Reporter, Certified Realtime
6	Reporter, Notary Public, and LYNN PEPPEY BAYER, CM,
7	Certificate of Merit, Notary Public, with the firm of
8	Gramann Reporting Ltd., 710 North Plankinton Avenue, Suite
9	710, Milwaukee, Wisconsin, do hereby certify that we
10	reported the foregoing proceedings had on June 25, 2014,
11	and that the same is true and correct in accordance with
12	our original machine shorthand notes taken at said time
13	and place.
14	Champel Starte
15	
16	Jennifer M. Steidtmann
17	Registered Professional Reporter
18	Certified Realtime Reporter
19	& m Baye
20	- Lynn
21	Lynn Peppy Bayer
22	Certificate of Merit
23	₩ C LYNN M. BAYER
24	Dated this 27th day of June, 2014. OF WISCONST
25	Madison, Wisconsin.

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